



## General Committee Revised Agenda

### Revised Items are Italicized.

Meeting Number: 5  
March 4, 2019, 9:30 AM - 3:00 PM  
Council Chamber

Please bring this General Committee Agenda to the Council meeting on March 19, 2019.

---

#### Pages

1. CALL TO ORDER
2. DISCLOSURE OF PECUNIARY INTEREST
3. APPROVAL OF PREVIOUS MINUTES
  - 1) That the minutes of the February 19, 2019 General Committee meeting be confirmed.
- 3.1 MINUTES OF THE FEBRUARY 19, 2019 GENERAL COMMITTEE (16.0) 7
  1. That the minutes of the February 19, 2019 General Committee meeting be confirmed.
4. DEPUTATIONS
5. PRESENTATIONS - FINANCE & ADMINISTRATIVE ISSUES
  - 5.1 *THERE IS AN URGENT NEED FOR A RESIDENTIAL HOSPICE IN MARKHAM (12.2.6)* 18
    1. That the presentation by Mr. Andy Langer, Member of the Committee for an Age-Friendly Markham entitled “There is an Urgent Need for a Residential Hospice in Markham” be received.
6. COMMUNICATIONS 26

**Note:** Questions regarding Regional correspondence should be directed to Chris Raynor, Regional Clerk.

  1. That the following communications dated February 1, 2019 from York Region be received for information purposes:

- a. Water and Wastewater Capital Infrastructure Status Update
- b. Traffic and Pedestrian Signal Policy Review of Atypical Request
- c. Inclusion Charter for City of Markham

## 7. PETITIONS

## 8. CONSENT REPORTS - FINANCE & ADMINISTRATIVE ISSUES

### 8.1 MINUTES OF THE FEBRUARY 5, 2019, FEBRUARY 8, 2019 AND FEBRUARY 13, 2019 BUDGET COMMITTEE (16.0) 55

- 1. That the minutes of the February 5, 2019, February 8, 2019 and February 13, 2019 Budget Committee meeting be received for information purposes.

### 8.2 MINUTES OF THE JANUARY 8, 2019 SENIORS ADVISORY COMMITTEE (16.0) 75

- 1. That the minutes of the January 8, 2019 Seniors Advisory Committee meeting be received for information purposes.

### 8.3 MINUTES OF THE DECEMBER 17, 2018 MARKHAM PUBLIC LIBRARY BOARD (16.0) 78

- 1. That the minutes of the December 17, 2018 Markham Public Library Board meeting be received for information purposes.

### 8.4 2018 SUMMARY OF REMUNERATION AND EXPENSES FOR COUNCILLORS AND APPOINTEES TO BOARDS (7.0) 84

S. Skelcher, ext. 3880

- 1. That the report titled “2018 Summary of Remuneration & Expenses for Councillors and Appointees to Boards” be received; and
- 2. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

## 9. CONSENT REPORTS - COMMUNITY SERVICE ISSUES

### 9.1 OPERATIONS AND MAINTENANCE AGREEMENTS FOR MUNICIPAL HIGHWAYS (5.0) 88

A. Lam, ext. 2748

- 1. That the staff report entitled, Operations and Maintenance Agreement

for municipal highways, be received; and,

2. That the Director of Operations be authorized to execute agreements between the City and other government entities and agencies relating to the operation and maintenance of municipal highways in the City of Markham, provided that the form and content of such agreements are satisfactory to the Commissioner of the Community and Fire Services and the City Solicitor; and further,
3. That staff be authorized and directed to do all things necessary to give effect to this resolution.

## **9.2 ANNUAL WATER QUALITY REPORT (JANUARY – DECEMBER 2018) (5.3)**

91

H. Frantzke, ext. 2449

1. That the report titled “Annual Water Quality Report (January-December 2018)” as required by Schedule 22 of Ontario Regulation 170/03, under the *Safe Drinking Water Act, 2002*, enclosed herein be received; and,
2. That the Annual 2018 Regulatory Water Quality Report (Attachment “A”), containing information for the Ministry of the Environment, Conservation and Parks (MECP) on water supply and quality as required by Section 11 of Ontario Regulation 170/03, under the *Safe Drinking Water Act, 2002*, be received; and,
3. That Council acknowledge that staff posted the Annual 2018 Detailed Regulatory Water Quality Report on the City’s website and that it has been made available electronically and in hard copy version by February 28, 2019 as per regulations; and further,
4. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

## **9.3 THE ONTARIO MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS – MARKHAM DISTRIBUTION SYSTEM – INSPECTION REPORT, JANUARY 09, 2019 (5.3)**

106

H. Frantzke, ext. 2449

1. That the report entitled “The Ontario Ministry of Environment, Conservation and Parks – Markham Distribution System –Inspection Report, January 09, 2019” be received; and,
2. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

## 10. PRESENTATIONS - FINANCE & ADMINISTRATIVE ISSUES

### 10.1 AUDITOR GENERAL REVIEW (7.0) 133

1. That the presentation provided by Geoff Rodrigues, CPA, CA, CIA, CRMA, ORMP, MNP LLP, Auditor General, City of Markham and Veronica Bila, CPA, CA, CIA, Auditor General Partner/Project Manager, entitled “Auditor General Services” be received.

### 10.2 VENDOR MANAGEMENT AUDIT- FOLLOW UP (7.0) 149

1. That the presentation provided by Veronica Bila, CPA, CA, CIA, Auditor General Partner/Project Manager entitled “Vendor Management Audit-Follow Up” be received; and,
2. That the report prepared by Geoff Rodrigues, CPA, CA, CIA, CRMA, ORMP, MNP LLP, Auditor General, City of Markham, entitled “Vendor Management Audit-Follow Up” be received; and further,
3. That staff be authorized and directed to do all things necessary to give effect to the recommendations.

## 11. REGULAR REPORTS - FINANCE & ADMINISTRATIVE ISSUES

### 11.1 DIGITAL PAYMENT INITIATIVE (7.0) 167

**Note: At the February 19, 2019 General Committee Meeting, Committee directed Staff to prepare a memo on this matter.**

S. Manson, ext. 7514

- 1) That the memo entitled Digital Payment Initiative dated February 21<sup>th</sup>, 2019 be received; and,
- 2) That Council approve discontinuing the acceptance of cash as a form of payment for property taxes effective January 1<sup>st</sup>, 2020; and,
- 3) That Staff will report back in 2021 with the results and feedback of the initiative, along with possible future payment modification opportunities for Council consideration; and further,
- 4) That staff be authorized and directed to do all things necessary to give effect to this resolution.

## 12. MOTIONS

13. NOTICES OF MOTION

14. NEW/OTHER BUSINESS

*As per Section 2 of the Council Procedural By-Law, "New/Other Business would generally apply to an item that is to be added to the **Agenda** due to an urgent statutory time requirement, or an emergency, or time sensitivity".*

15. ANNOUNCEMENTS

16. CONFIDENTIAL ITEMS

That, in accordance with Section 239 (2) of the Municipal Act, General Committee resolve into a confidential session to discuss the following matters:

16.1 FINANCE & ADMINISTRATIVE ISSUES

16.1.1 GENERAL COMMITTEE CONFIDENTIAL MINUTES -  
FEBRUARY 4, 2019 (16.0) [Section 239 (2) (c)]

16.1.2 *BUDGET COMMITTEE CONFIDENTIAL MINUTES -  
JANUARY 29, 2019 (16.0) [Section 239 (2) (c)]*

16.2 COMMUNITY SERVICES ISSUES

16.2.1 PERSONAL MATTERS ABOUT AN IDENTIFIABLE  
INDIVIDUAL, INCLUDING MUNICIPAL OR LOCAL BOARD  
EMPLOYEES (6.3) [Section 239 (2) (b)]

17. ADJOURNMENT

### **Information Page**

**General Committee Members:** All Members of Council

**General Committee**

Chair: Regional Councillor Jack Heath

Vice Chair: Councillor Khalid Usman

**Finance & Administrative Issues**

Chair: Regional Councillor Jack Heath

Vice Chair: Councillor Khalid Usman

**Community Services Issues**

Chair: Councillor Karen Rea

Vice Chair: Councillor Isa Lee

**Environment & Sustainability Issues**

Chair: Regional Councillor Joe Li

Vice Chair: Councillor Reid McAlpine

**Land, Building & Parks Construction Issues**

Chair: Councillor Keith Irish

Vice Chair: Councillor Andrew Keyes

General Committee meetings are audio and video streamed live at the City of Markham's website.

Alternate formats are available upon request.

**Consent Items:** All matters listed under the consent agenda are considered to be routine and are recommended for approval by the department. They may be enacted on one motion, or any item may be discussed if a member so requests.

**Note:** The times listed on this agenda are approximate and may vary; Council may, at its discretion, alter the order of the agenda items.

**Note: As per the Council Procedural By-Law, Section 7.1 (h)  
General Committee will take a 10 minute recess after  
two hours have passed since the last break.**

**General Committee is scheduled to recess for lunch from  
approximately 12:00 PM to 1:00 PM.**



## General Committee Minutes

**Meeting Number: 4**

**February 19, 2019, 9:30 AM - 2:00 PM**

**Council Chamber**

Roll Call	Deputy Mayor Don Hamilton	Councillor Reid McAlpine
	Councillor Jack Heath	Councillor Karen Rea
	Regional Councillor Joe Li	Councillor Andrew Keyes
	Regional Councillor Jim Jones	Councillor Amanda Collucci
	Councillor Keith Irish	Councillor Khalid Usman
	Councillor Alan Ho	Councillor Isa Lee
Regrets	Mayor Frank Scarpitti	
Staff	Andy Taylor, Chief Administrative Officer	Bryan Frois, Chief of Staff
	Trinela Cane, Commissioner of Corporate Services	Kimberley Kitteringham, City Clerk
	Arvin Prasad, Commissioner Development Services	Martha Pettit, Deputy City Clerk
	Catherine Conrad, City Solicitor and Acting Director of Human Resources	Phoebe Fu, Director of Environmental Services
	Joel Lustig, Treasurer	Josh Machesney, Acting Council/Committee Coordinator

### 1. CALL TO ORDER

The General Committee meeting convened at the hour of 9:34 AM with Regional Councillor Jack Heath in the Chair.

### 2. DISCLOSURE OF PECUNIARY INTEREST

None disclosed.

### 3. APPROVAL OF PREVIOUS MINUTES

#### 3.1 MINUTES OF THE FEBRUARY 4, 2019 GENERAL COMMITTEE (16.0)

Moved By Councillor Andrew Keyes  
Seconded By Councillor Khalid Usman

1) That the minutes of the February 4, 2019 General Committee meeting be confirmed.

**Carried**

**3.2 MINUTES OF THE FEBRUARY 4, 2019 SPECIAL GENERAL COMMITTEE (16.0)**

Moved By Councillor Andrew Keyes  
Seconded By Councillor Khalid Usman

1) That the minutes of the February 4, 2019 Special General Committee meeting be confirmed.

**Carried**

**4. DEPUTATIONS**

There were no deputations.

**5. PETITIONS**

There were no petitions.

**6. CONSENT REPORTS - FINANCE & ADMINISTRATIVE ISSUES**

**6.1 MINUTES OF THE NOVEMBER 19, 2018 AND DECEMBER 17, 2018 ADVISORY COMMITTEE ON ACCESSIBILITY (16.0)**

Moved By Councillor Alan Ho  
Seconded By Councillor Keith Irish

1) That the minutes of the November 19, 2018 and December 17, 2018 Advisory Committee on Accessibility meeting be received for information purposes.

**Carried**

**6.2 MINUTES OF THE NOVEMBER 21, 2018 ANIMAL CARE COMMITTEE (16.0)**

Moved By Councillor Alan Ho

Seconded By Councillor Keith Irish

1) That the minutes of the November 21, 2018 Animal Care Committee meeting be received for information purposes.

**Carried**

**6.3 MINUTES OF THE JANUARY 18, 2019, JANUARY 22, 2019, JANUARY 25, 2019 AND JANUARY 29, 2019 BUDGET COMMITTEE (16.0)**

Moved By Councillor Reid McAlpine

Seconded By Councillor Khalid Usman

1) That the minutes of the January 18, 2019, January 22, 2019, January 25, 2019 and January 29, 2019 Budget Committee meeting be received for information purposes.

**Carried**

**6.4 MINUTES OF THE NOVEMBER 5, 2018, DECEMBER 3, 2018 AND JANUARY 14, 2019 RACE RELATIONS COMMITTEE (16.0)**

Moved By Councillor Alan Ho

Seconded By Councillor Keith Irish

1) That the minutes of the November 5, 2018, December 3, 2018 and January 14, 2019 Race Relations Committee meeting be received for information purposes.

**Carried**

**6.5 MINUTES OF THE OCTOBER 4, 2018 AND NOVEMBER 1, 2018 SANTA CLAUS PARADE COMMITTEE (16.0)**

Moved By Councillor Alan Ho  
Seconded By Councillor Keith Irish

1) That the minutes of the October 4, 2018 and November 1, 2018 Santa Claus Parade Committee meeting be received for information purposes.

**Carried**

**6.6 STAFF AWARDED CONTRACTS FOR THE MONTH OF JANUARY 2019 (7.12)**

Moved By Deputy Mayor Don Hamilton  
Seconded By Councillor Karen Rea

1) That the report entitled “Staff Awarded Contracts for the Month of January 2019” be received; and,

2) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**Carried**

**6.7 AWARD OF CONSTRUCTION TENDER 134-T-18 WEST THORNHILL – PHASE 2D STORM SEWER AND WATERMAIN REPLACEMENT (7.12)**

Moved By Councillor Alan Ho  
Seconded By Councillor Keith Irish

1) That the report entitled “Award of Construction Tender 134-T-18 West Thornhill – Phase 2D Storm Sewer and Watermain Replacement” be received; and,

- 2) That the contract for Tender 134-T-18 West Thornhill – Phase 2D Storm Sewer and Watermain Replacement be awarded to the lowest priced Bidder, KAPP Infrastructure Inc. in the amount of \$7,579,708.08, inclusive of HST; and,
- 3) That a 10% contingency in the amount of \$757,970.81 inclusive of HST, be established to cover any additional construction costs and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy; and,
- 4) That the construction award in the amount of \$8,337,678.89 (\$7,579,708.08 + \$757,970.81) be funded from the following capital projects:
  - (a) 058-6150-19239-005 “West Thornhill Flood Control Implementation - Phase 2D Construction”;
  - (b) 053-5350-19245-005 “Cast Iron Watermain Replacement – West Thornhill Phase 2D” as outlined under the financial considerations section in this report; and,
- 5) That the remaining funds in project #19239 “West Thornhill Flood Control Implementation - Phase 2D Construction” in the amount \$1,734,931.67 will not be required from the Stormwater Fee Reserve and the budget remaining in project #19245 “Cast Iron Watermain Replacement – West Thornhill Phase 2D” in the amount of \$1,266,495.44 will be returned to the original funding source; and,
- 6) That a 5-year moratorium be placed on any major servicing and utility installation along restored areas including Grandview Avenue (Jewell St to Henderson Ave), Highland Park Blvd – North/ South leg (from Grandview Ave to Highland Park Blvd), Henderson Avenue (from Grandview Ave to Dalmeny Rd) and Dalmeny Road (from Henderson Ave Cul-de-sac); and further,
- 7) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**Carried**

**6.8 AWARD OF RFP 224-R-18 CONSULTING ENGINEERING SERVICES FOR CAST IRON WATERMAIN REPLACEMENT/ REHABILITATION DESIGN AND CONTRACT ADMINISTRATION (7.12)**

Moved By Councillor Alan Ho  
 Seconded By Councillor Keith Irish

- 1) That the report entitled “Award of RFP 224-R-18 Consulting Engineering Services for Cast Iron Watermain Replacement/ Rehabilitation Design and Contract Administration ” be received; and,
- 2) That the Phase 1 (Laureleaf Area) detailed design work under contract 224-R-18 Consulting Engineering Services for Cast Iron Watermain Replacement/ Rehabilitation Design be awarded to the highest ranked, lowest priced Bidder, LEA Consulting Ltd., in the amount of \$289,391.19, inclusive of HST; and,
- 3) That a 10% contingency in the amount of \$28,939.12, inclusive of HST, be established to cover any additional design costs for Phase 1 (Laureleaf Area) and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy; and,
- 4) That the Consulting Engineering Services for Phase 1 (Laureleaf Area) detailed design award in the amount of \$318,330.31 (\$289,391.19 + \$28,939.12) be funded from the capital project 053-6150-19242-005 “Cast Iron Watermain Replacement – Design”; and,
- 5) That the remaining budget of \$88,669.69 in capital project #19242 “Cast Iron Watermain Replacement – Design” will be returned to the original funding source; and,
- 6) That the 2020/21 contract administration and design work under contract 224-R-18 Consulting Engineering Services for Cast Iron Watermain Replacement/ Rehabilitation Design be awarded to the highest ranked, lowest priced Bidder, LEA Consulting Ltd., in the following amounts (inclusive of 10% contingency):
  - 2020 Contract Administration Phase 1 (Laureleaf Area) in the amount of \$277,435.61 (\$252,214.20 + (\$25,221.42 - contingency))
  - 2020 Design Phase 2 (various locations) in the amount of \$289,042.26 (\$262,765.69 + (\$26,276.57- contingency))
  - 2021 Contract Administration Phase 2 (various locations) in the amount of \$264,395.07 (\$240,359.15 + (\$24,035.92- contingency)); and,
- 7) That the Consulting Engineering Services for construction and design award amounts for 2020/21 be requested as part of the 2020 and 2021 Capital budget process, subject to Council approval of the respective years capital budgets; and further,
- 8) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**Carried**

**6.9 2019 BUDGET PRESENTATION FOR THE FEBRUARY 21, 2019 PUBLIC CONSULTATION MEETING (7.0)**

Moved By Councillor Alan Ho

Seconded By Councillor Keith Irish

1) That the presentation entitled “2019 Budget Public Budget Consultation Meeting February 21, 2019”, be received and approved for presentation at the February 21, 2019 Public Budget Consultation meeting.

**Carried**

**7. PRESENTATIONS - FINANCE & ADMINISTRATIVE ISSUES**

**8. REGULAR REPORTS - FINANCE & ADMINISTRATIVE ISSUES**

**8.1 PROPOSED PREGNANCY OR PARENTAL LEAVE POLICY FOR MEMBERS OF COUNCIL (12.1)**

Kimberley Kitteringham, City Clerk and Director of Legislative Services & Communications, introduced the item and advised that the Proposed Pregnancy or Parental Leave Policy for Members of Council is prescribed by Bill 68, and should be implemented by March 1, 2019.

There were questions with respect to the length of the proposed leave allowance and how it can be used.

Moved By Deputy Mayor Don Hamilton

Seconded By Councillor Karen Rea

1) That the report titled, “*Proposed Pregnancy or Parental Leave Policy for Members of Council*” be received for information purposes; and,

2) That Markham City Council adopt the proposed *Pregnancy or Parental Leave Policy for Members of Council* included as **Appendix “A”** and further,

3) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**Carried**

## **8.2 REVISED COUNCIL CODE OF CONDUCT IN ACCORDANCE WITH BILL 68 (16.23)**

Kimberley Kitteringham, City Clerk and Director of Legislative Services & Communications, introduced the item and advised that the Revised Council Code of Conduct in Accordance with Bill 68 addresses the changes required as a result of Bill 68. She further indicated that it is the intention of Staff to come back in the spring with the City's Integrity Commissioner to have a more fulsome training and education session with Members of Council.

Ms. Kitteringham reviewed the notable proposed changes to the Council Code of Conduct in accordance with Bill 68:

- Changes to the responsibilities of a municipally appointed Integrity Commissioner;
- Requests for advice from the Integrity Commissioner to a Councillor or local board member must be in writing;
- If an Integrity Commissioner provides educational information to the public, they may summarize advice they provided to a Councillor but shall not disclose any confidential information;
- A municipality must now indemnify and save harmless the Integrity Commissioner and any person in connection with the defense of a proceedings if the proceeding relates to an act done in good faith in the performance of the Integrity Commissioner's duties.

There was discussion on the following proposed changes to the Council Code of Conduct:

- Communications with the Public & Media Relations;
- Relations with Staff;
- Compliance with Code of Conduct;
- Requests for Advice from the Integrity Commissioner;
- Investigations, Investigation Protocol and the introduction of Conflict of Interest Investigation Protocol.

Moved By Councillor Isa Lee

Seconded By Regional Councillor Joe Li

1) That the report titled, "*Revised Council Code of Conduct in Accordance with Bill 68*" be received for information purposes; and,

2) That Markham City Council adopt the revised *Council Code of Conduct* included as **Appendix “C”** to this report; and further,

3) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**Carried**

### **8.3 DIGITAL PAYMENT INITIATIVE (7.0)**

Shane Manson, Senior Manager, Revenue & Taxation, was in attendance to present the Digital Payment Initiative report. The report sought Council approval for discontinuing the acceptance of cash and cheques as a form of payment for transactional services completed through the Cash Management and Contact Centre Service Counters effective January 1<sup>st</sup>, 2020. This initiative would enable migrating all payment transactions completed through the contact centre and cash management counters to digital form of payments.

Members of General Committee discussed the following:

- The timing and implementation period of the initiative;
- The impact on payment preference for some residents and business owners (specifically seniors) who may not be familiar or have the ability to pay in digital form;
- Maintaining the acceptance of cheques as a form of payment for transactional services;
- The possibility of rolling out the initiative in phases to allow residents more time to adapt to the proposed changes; and,
- Consulting with the Seniors Advisory Committee to better understand the impacts on seniors

Joel Lustig, Treasurer suggested that the Committee should consider eliminating the acceptance of cash payments for property taxes only. Committee requested that Staff prepare a memo addressing the discussion and return to the March 4, 2019 General Committee meeting.

1) That the report entitled Digital Payment Initiative dated February 19<sup>th</sup>, 2019 be received; and,

2) That Council approve the Digital Payment Initiative effective January 1<sup>st</sup>, 2020; and further,

3) That staff be authorized and directed to do all things necessary to give effect to this resolution.

**Amendment:**

Moved By Councillor Karen Rea  
Seconded By Regional Councillor Jim Jones

- 1) That the report entitled Digital Payment Initiative dated February 19<sup>th</sup>, 2019 be received; and,
- 2) That this item be referred to the March 4, 2019 General Committee meeting for further consideration; and,
- 3) That Staff be directed to prepare an information memo for Committee.

**Carried**

**9. MOTIONS**

There were no motions.

**10. NOTICES OF MOTION**

There were no notices of motion.

**11. NEW/OTHER BUSINESS**

There was no new business.

**12. ANNOUNCEMENTS**

There were no announcements.

**13. ADJOURNMENT**

The General Committee meeting adjourned at 11:49 AM.

Moved By Councillor Khalid Usman  
Seconded By Councillor Amanda Collucci

- 1) That General Committee be adjourned.

**Carried**

# THERE IS AN URGENT NEED FOR A RESIDENTIAL HOSPICE IN MARKHAM!

Presented to General Committee, City of Markham – March 2019



*“Making Markham an Age-Friendly Community!”*  
- Markham’s Older Adult Strategy 2017

# WHAT IS A HOSPICE?

- Hospice provides palliative care.
- It is aimed at improving the quality of life for persons who are living with, and dying from, advanced illness.
- It also provides service to family and friends.
- Hospice palliative care can be delivered:
  - in a hospital
  - in the community through an outpatient, or visiting service
  - in a residential hospice within a supervised environment.
- A residential hospice:
  - is a healthcare facility
  - is a registered charity
  - provides palliative care services 24/7 in a home-like setting at no cost to the user.



***Markham does NOT have a residential hospice!***

# PALLIATIVE CARE AVAILABILITY IN YORK REGION

FACILITY	LOCATION	# OF BEDS
<b>ACUTE PALLIATIVE CARE</b>		
1. Mackenzie Health Centre	Richmond Hill	14
2. Markham-Stouffville Hospital	Markham	13
3. Southlake Regional Health Centre	Newmarket	9
<b>RESIDENTIAL</b>		
1. Hill House Hospice	Richmond Hill	3
2. Hospice Vaughan ( <i>Under Construction</i> )	Vaughan	10
3. Margaret Bahen Hospice	Newmarket	10
<b>COMMUNITY OUTREACH</b>		
1. Doane House	Newmarket	-
2. Evergreen	Markham	-
3. Hope House	King / Aurora / Richmond Hill	-
4. Hospice Georgina	Sutton	-

# THE NEED FOR A RESIDENTIAL HOSPICE IN MARKHAM

- The Ministry of Health and Long Term Care has residential hospice guidelines for every municipality.
- Markham should have 23 residential hospice beds in addition to the existing beds in Markham-Stouffville Hospital (MSH).
- By 2031, based on population growth projections, Markham should have up to 35 residential hospice beds in addition to the existing beds in MSH.



# REQUIRED NUMBER OF PALLIATIVE BEDS

STANDARD CALCULATION						
	MARKHAM			YORK REGION		
	Total	Residential Hospice	Acute Palliative	Total	Residential Hospice	Acute Palliative
Based on 2016 Census	32	<b>23</b>	9	107	<b>75</b>	32
Projected 2031 Census	41	<b>29</b>	12	143	<b>101</b>	42
The standard calculation is based on beds being 70% hospice, 30% acute.						
ALTERNATIVE CALCULATION (Projected – 2031 census)						
Low (7 Beds)	30	<b>24</b>	6	105	<b>84</b>	21
High (10 Beds)	43	<b>35</b>	8	149	<b>120</b>	29
The alternative calculation is based on beds being 80% hospice, 20% acute.						

# WHAT ARE THE BASIC REQUIREMENTS?

- Leading practices show that creating a 'home-like' environment is most desirable. Smaller residential hospice facilities, 10 to 20 beds, are ideal.
- Parking for staff and visitors, possibly below grade. Approximately 20 to 40 spaces are needed depending on the number of beds.
- Access to public transit.



# ESTIMATED SPACE REQUIREMENT

PURPOSE	10 BEDS		20 BEDS	
	Sq.m.	Sq.ft.	Sq.m.	Sq.ft.
Bedrooms with ensuite bathroom facilities	320	3,444	640	6,889
Common and family areas	175	1,884	350	3,767
Overnight capacity for family members	65	700	130	1,399
Infrastructure needs (kitchen, supplies, nursing stations, employee areas, etc.)	350	3,767	700	7,535
<b>Total for residential hospice</b>	<b>910</b>	<b>9,795</b>	<b>1,820</b>	<b>19,590</b>

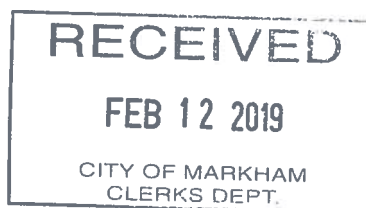


## THE NEXT STEPS



- We are asking that this presentation be sent to staff with a request of them to investigate opportunities and options for a hospice to be located in Markham, and to host a meeting of interested stakeholders.
- We are asking that staff report back to General Committee as soon as possible.

Thank You For Your Consideration.  
Any Questions?



Corporate Services  
Regional Clerk's Office

February 1, 2019

Ms. Kimberley Kitteringham  
City Clerk  
City of Markham  
101 Town Centre Boulevard  
Markham, ON L3R 9W3

Dear Ms. Kitteringham:

**Re: Water and Wastewater Capital Infrastructure Status Update**

On January 31, 2019 Regional Council adopted the following recommendation:

1. The Regional Clerk circulate this report to the local municipalities, Building Industry and Land Development Association and the Minister of Municipal Affairs and Housing.

The original staff report is enclosed for your information.

Please contact Mike Rabeau, Director, Capital Planning and Delivery, Environmental Services at 1-877-464-9675 ext. 75157 if you have any questions with respect to this matter.

Sincerely,

A handwritten signature in black ink, appearing to be "Christopher Raynor", written over a horizontal line.

Christopher Raynor  
Regional Clerk

Attachment

# **The Regional Municipality of York**

Committee of the Whole  
Environmental Services  
January 10, 2019

Report of the Commissioner of Environmental Services

## **Water and Wastewater Capital Infrastructure Status Update**

### **1. Recommendation**

It is recommended that:

1. The Regional Clerk circulate this report to the local municipalities, Building Industry and Land Development Association and the Minister of Municipal Affairs and Housing.

### **2. Summary**

This annual report updates Council on the status of key water and wastewater infrastructure projects required to meet future system demands and identified as triggers for release of servicing capacity and associated approvals. Staff will report back to Council in Q3 2019 on servicing capacity for all municipalities serviced by the York Durham Sewage System.

### **3. Background**

#### **2016 capacity assignment approved growth to more than 1.3 million people**

In September 2016, Council approved a capacity assignment of 71,838 people to local municipalities bringing the cumulative servicing capacity assigned to support Region-wide growth to over 1.3 million people. In order for local municipal growth to occur, it is essential that water and wastewater servicing is available. The amount of servicing capacity, expressed in persons, is “assigned” to local municipalities and, in turn, the local municipalities allocate that capacity to individual developments to support residential growth.

The unused capacity in the York Durham Sewage System at the end of 2017 is estimated at 132,000 persons. The capacity available for the end of 2018 will be calculated over the coming months. Twinning of the Newmarket forcemain is the only trigger project associated with the 2016 capacity assignment and is required to unlock the 1,500 persons capacity assigned to Town of Newmarket. In March 2018, the Ontario Minister of Natural Resources and Forestry signed a declaration order allowing construction of the forcemain twinning in Newmarket to proceed prior to approval of the Upper York Sewage Solutions Individual Environmental Assessment allowing allocation of 1,500 persons capacity once the forcemain is commissioned in 2021.

## **10,500 persons capacity assigned to Aurora, Newmarket and East Gwillimbury in 2018**

In June 2018, Council authorized an assignment of 10,500 persons capacity to Aurora, Newmarket and East Gwillimbury to support forecasted growth through multiple capacity sources including two interim solution projects: Aurora Pumping Station Upgrades and a new pumping station including a connection near Yonge Street and Henderson Avenue. These projects will support growth in Aurora, Newmarket and East Gwillimbury as the Region awaits approval of the Upper York Sewage Solutions project.

Staff will report back to Council in Q3 2019 on servicing capacity for all municipalities serviced by the York Durham Sewage System.

## **Capital Plan focuses on building the Regional water and wastewater network, sustaining infrastructure service levels and managing system risk and resiliency**

Environmental Services is responsible for delivering approximately 40 per cent of the Regional 10 Year Capital Plan. Implementation of the works identified in the 10 Year Water and Wastewater Capital Plan remains critical for delivering capacity needed to service growth within current financial limits. The overall capital program has over 140 active projects that are progressing. These projects focus on building the trunk system, sustaining infrastructure service levels and managing system risk and resiliency.

## **Water and wastewater infrastructure projects required to support growth are reviewed and reported to Council regularly**

On November 2, 2017, Council received the last Water and Wastewater Capital Infrastructure Status Update report. The next Water and Wastewater Capital Infrastructure Update is scheduled for Q1 2020.

## **4. Analysis**

The 2018 approved budget identified a 10 Year Capital Plan totalling \$2.5 billion, 43 per cent of the Regional Capital Plan. The following provides an update on key Environmental Services projects within the 10 Year Capital Plan. A project summary and a location map are included in Attachments 1 and 2, respectively.

## **DUFFIN CREEK PLANT**

### **Duffin Creek Plant Stages 1 and 2 Upgrades are totally complete and in warranty phase**

The Duffin Creek Plant Stages 1 and 2 Upgrades included critical work that had to be complete by the end of 2017 to satisfy conditions with the Environmental Compliance Approval for the Duffin Creek Plant Stage 3 Expansion. This deadline was achieved and final demolitions and restoration works were completed over 2018. The project is now totally complete and is in the warranty phase.

### **Duffin Creek Plant Outfall Class Environmental Assessment was submitted to the Ministry in November 2013 and is still awaiting Minister's decision**

In 2013, York and Durham Regions filed the Duffin Creek Outfall Class Environmental Assessment and, during the review period, received 90 submissions of which 75 were Part II Order Requests seeking a ministerial order for the Regions to complete an Individual Environmental Assessment.

### **Majority of Part II Order Requests submitted to the Ministry were form letters**

Most of the Part II Order Requests came from the Town of Ajax, Lake Ontario Waterkeepers, Pickering and Ajax Citizens Together to Protect Our Water (PACT POW) and Environmental Defence. Issues raised in these Part II Order submissions related to allegations that phosphorus discharged from the Duffin Creek Plant was responsible for a resurgence of *Cladophora* algae growth that was impacting the adjacent waterfront. The majority of the remaining Part II Order Requests were a "form letter" type of submission organized by the PACT POW stakeholder group and reflected a duplication of key issues raised by the Town of Ajax.

### **Surface runoff is major contributor to algae growth throughout all the Great Lakes**

Algae growth is a major concern not only on the Ajax/Pickering shoreline but throughout the Great Lakes. Scientists are consistently reporting that lowering phosphorus discharges from wastewater treatments plants or the installation of tertiary treatment are not the solutions to nuisance algae growth. Recent Lake Erie studies demonstrate that an effective phosphorus management strategy must focus on surface runoff sources as deriving the greatest benefit for reducing algae growth. There are many sources of phosphorus including water, tributaries, stormwater runoff, farmland runoff and wind currents that blow dust. Combined, these other sources contribute significantly more phosphorus to the Ajax/Pickering shoreline than Duffin Creek Plant does.

## **Duffin Creek Plant continues to outperform other large treatment plants on Lake Ontario**

The Duffin Creek Plant has been expanded and upgraded over the past 15 years to install enhanced phosphorus removal technology that removes over 94 per cent of the raw sewage phosphorus loading entering the plant. The Duffin Creek Plant has one of the highest quality effluents of all the large wastewater plants discharging to the open waters of Lake Ontario. The Duffin Creek Plant consistently meets or surpasses discharge parameters set out by the Ministry of the Environment, Conservation and Parks, and surpasses the discharge limits of other comparable large plants discharging to Lake Ontario. Furthermore, unlike most other comparable plants, the Duffin Creek Plant provides full treatment of all wastewater flows even during extreme high-flow rainfall events and unlike most of the large plants on Lake Ontario the Duffin Creek Plant can claim zero bypass discharges.

## **Durham and York Region jointly submitted Phosphorus Reduction Action Plan in January 2018**

To assist with a decision on the Outfall Class Environmental Assessment, the Minister issued an Order to the Regions on April 4, 2016, outlining requirements for the Regions to undertake a Phosphorus Reduction Action Plan study at the Duffin Creek Plant.

The Regions retained an internationally recognized team to undertake the Phosphorus Reduction Action Plan study. Durham Regional Council also requested York and Durham staff to consult with the Town of Ajax during the Phosphorus Reduction Action Plan study. The Ministry of the Environment, Conservation and Parks subsequently granted an extension to the due date to ensure that Ajax staff and their consultants were fully engaged in the progress of the study.

Durham and York Region submitted the Phosphorus Reduction Action Plan study final report in January 2018. The Regions submitted responses to public comments received during the 45-day Phosphorus Reduction Action Plan study review period on March 16, 2018.

The final recommendation from the Phosphorus Reduction Action Plan study is to implement optimization of chemically enhanced phosphorus removal in the existing secondary treatment process at the Duffin Creek Plant. The new effluent objectives and limits proposed in the Phosphorus Reduction Action Plan study for total phosphorus are below the Great Lakes Water Quality Agreement as well as the proposed target for wastewater treatments plants that discharge to the eutrophic Lake Erie. The target suggests a concentration of 0.5 milligrams per litre of phosphorus and the Regions have proposed an objective of 0.35 milligrams per litre.

Commitment to surpass the target outlined by the Great Lakes Water Quality Agreement and Lake Erie partners demonstrates the Region's environmental stewardship and commitment to continuous improvement.

The Regions believe that all necessary and requested information has been provided for the Ministry of the Environment, Conservation and Parks to make a decision on the Part II Order Requests and the Outfall Class Environmental Assessment.

## **UPPER YORK SEWAGE SOLUTIONS INDIVIDUAL ENVIRONMENTAL ASSESSMENT**

### **Region continues to communicate with the Ministry of the Environment, Conservation and Parks in anticipation of an Upper York Sewage Solutions Individual Environmental Assessment approval**

The Upper York Sewage Solutions project will provide additional servicing capacity of over 80,000 persons to support growth in the Towns of Aurora, Newmarket and East Gwillimbury. The proposed sewage solution includes a new Water Reclamation Centre in the Town of East Gwillimbury, modifications to the existing York Durham Sewage System in the Town of Newmarket and a project-specific total phosphorus offsetting program.

- In July 2014, after more than five years of extensive scientific study and consultation with stakeholders and First Nations, York Region submitted the Individual Environmental Assessment report to the province for approval. The Upper York Sewage Solutions Environmental Assessment was anticipated to be approved by February 2015 with commissioning of the Water Reclamation Centre scheduled for 2024. With delays in approval of the environmental assessment, the Water Reclamation Centre is currently scheduled for commissioning in 2026; however, this timing is dependent on approval of the environmental assessment in early 2019.
- In December 2016, the Ministry of the Environment and Climate Change informed the Region that it needed to complete its own provincial Crown legal Duty to Consult obligation with First Nations and advised that this process would delay project approval. The Region continues to await completion of the provincial duty to consult.
- Upon the Ministry's request in March 2017, the Region completed a voluntary Health Impact Assessment in November 2018 in consultation with the Chippewas of Georgina Island First Nation. The assessment, however, did not include Traditional Ecological Knowledge. Staff continue to work with the Ministry of the Environment, Conservation and Parks in anticipation of approval in order to proceed with the Upper York Sewage Solutions project. At the same time, the Region is continuing with detailed design to mitigate schedule impacts caused by approval delay and be in a position to implement delivery of the Upper York Sewage Solutions upon approval.

### **Region is implementing modifications to the existing York Durham Sewage System in the Town of Newmarket**

On March 7, 2018, the province issued a Declaration Order to exempt modifications to the York Durham Sewage System component of the Upper York Sewage Solutions project from the requirements of the *Environmental Assessment Act*. With the Declaration Order, the Region is proceeding to implement modifications to the existing York Durham Sewage System in the Town of Newmarket (twinning of the forcemains and alterations to the

Newmarket and Bogart Creek Sewage Pumping Stations). Construction of the modifications is scheduled to start in 2019 with commissioning expected in 2021.

### **Water Reclamation Centre and associated wastewater network design progressing in the absence of Individual Environmental Assessment approval**

The design for the Water Reclamation Centre and associated linear conveyance infrastructure is nearing completion and applications for all environmental approvals and permits required for implementation of the work are being prepared for formal submission to various regulatory agencies upon receipt of environmental assessment approval.

- The performance demonstration of the pre-selected membrane filtration system and pile testing program were concluded to optimize the Water Reclamation Centre treatment process and foundation design. The air management facility was also pre-selected for future system integration.
- The Region has successfully secured the property required for the proposed Water Reclamation Centre along with various other properties associated with the linear conveyance infrastructure. Staff continue to pursue the remaining properties to facilitate construction.
- The Region has completed the pre-construction environmental monitoring programs for the Water Reclamation Centre and its outfall at the East Holland River.

### **Region is partnering with Lake Simcoe Region Conservation Authority in preparation for the project-specific total phosphorus offsetting program**

At its meeting of November 16, 2017, Council authorized a partnership with the Lake Simcoe Region Conservation Authority to undertake a performance demonstration project for phosphorus removal by retrofitting two existing stormwater management facilities. This project will better prepare the Region for implementation of the project-specific total phosphorus offsetting program upon approval of the Upper York Sewage Solutions project. Pre-construction monitoring at the two stormwater management facilities was initiated in summer 2018 and construction of the facilities is scheduled to start in 2019.

### **Interim Infrastructure Solutions to provide water and wastewater servicing capacity to support growth in the Towns of Aurora, Newmarket, and East Gwillimbury**

At its meeting of June 28, 2018, Council authorized two interim infrastructure solutions to provide water and wastewater servicing capacity for a population of 11,500 persons to support growth in Aurora, Newmarket, and East Gwillimbury out of which 10,500 persons were assigned subject to completion of these trigger capital projects.

- Upgrades to the Region's Aurora Sewage Pumping Station project are pre-approved under the Municipal Class Environmental Assessment. Design work commenced in summer 2018 and commissioning is scheduled for 2021.

- The Region initiated an environmental assessment to identify the preferred location for a new pumping station near the intersection of Yonge Street and Henderson Avenue in Aurora. Construction of the new Henderson Sewage Pumping Station is anticipated to commence in 2020 with commissioning expected in 2022.

## **VAUGHAN WATER AND WASTEWATER PROJECTS**

### **Detailed Design for West Vaughan Sewage Servicing nearing completion**

An environmental assessment for West Vaughan Sewage Servicing to service future growth of 33,200 people and 50,100 employment population was completed in 2013. The West Vaughan Sewage Servicing project includes approximately 14 kilometres of trunk sewer, with 12 kilometres to be completed by 2028 and the remaining two kilometres to be completed after 2034, as well as expansion of the Humber Sewage Pumping Station to be completed by 2025.

All permit applications are being prepared and, in consultation with permitting agencies, will be submitted prior to construction based on the timing of each construction contract. Land acquisition is underway and a number of properties have been acquired with the majority of remaining properties/easements scheduled to be acquired in 2019, subject to expropriation timelines.

### **Humber Sewage Pumping Station upgrades allow near-term growth in the City of Vaughan to proceed as planned**

The Humber Sewage Pumping Station electrical upgrades were completed and fully commissioned in late 2016. These works, in combination with recently completed modifications to forcemain controls, have improved operational flexibility and have allowed growth in Vaughan to continue until the need for the West Vaughan sewer.

### **West Vaughan Water Servicing Strategy has identified opportunities to optimize the existing infrastructure in the system to service long-term growth**

York Region has updated the Water Servicing Strategy for parts of West Vaughan including Kleinburg-Nashville. The strategy has identified opportunities to optimize existing infrastructure to service West Vaughan's long-term projected growth.

The overall strategy is to use the available storage capacity in West Vaughan to offset identified storage deficits in the system. By adjusting the set points of the existing pressure reducing valves, it will supply more water to other areas in the system without building any additional infrastructure. The target completion for this work is Q4 2020.

The work was identified in the 2016 Water and Wastewater Master Plan Update. The works to be completed as part of the West Vaughan Water Servicing project are included in the 10 Year Capital Plan.

## **Northeast Vaughan Water and Wastewater Class Environmental Assessment Study to be filed with the Ministry of the Environment, Conservation and Parks**

The Class Environmental Assessment Study will provide additional water and wastewater servicing capacity to accommodate anticipated growth in northeast Vaughan up to 2051, including approximately 155,000 persons of residential and employment within the wastewater service area and 115,000 persons of residential and employment within the water service area. The study is to be filed for public review in Q1 2019 (last reported: Q1 2018). The delay in filing the study will not impact the overall completion of the work, which is currently scheduled for 2028 (last reported: 2028). The delay is a result of challenges in confirming appropriate pumping and water storage sites.

The preferred water servicing solution includes construction of watermains to connect two new elevated water storage tanks and two new pumping stations. Preferred sites identified for water infrastructure were as follows:

- New pumping station in the Jane Street and Teston Road area
- New pumping station and elevated tank north of the Jane Street and Kirby Road intersection
- New elevated tank west of Jane Street and King-Vaughan Road intersection

The preferred wastewater servicing solution includes construction of six kilometres of new trunk sewer. The proposed trunk sewer is divided into segments and would begin at Teston Road and connect to the existing York Durham Sewage System at three specific points:

- A section of approximately 4.5 kilometres along Jane Street from Teston Road to south of Rutherford Road
- A relatively small (180-metre) relief sewer section located south of Rutherford Road, between Jane Street and Keele Street, in the existing Jane-Rutherford Sanitary Trunk Sewer easement
- A section of sewer approximately 1.9 kilometres along Keele Street from south of Rutherford Road to Langstaff Road, and then east crossing Keele Street to an area just south of Langstaff Road

### **Maple Pumping Station interim construction completed ahead of schedule and new pump will meet early growth demands**

An additional pump has been installed at the Maple Pumping Station that will provide some capacity for near-term growth in northeast Vaughan on an interim basis and provide additional fire flow until new storage facilities identified as part of Northeast Vaughan Environmental Assessment Study are completed in 2028. The construction contract was tendered in May 2018 and installation of the new pump is complete with commissioning to be finalized in January 2019 (last reported: Q1 2019).

## **Nobleton Class Environmental Assessment has commenced**

An Environmental Assessment has commenced to assess alternative water and wastewater servicing solutions and select the preferred alternatives to accommodate planned growth (to 10,800 people) in Nobleton. As part of the Environmental Assessment, a comprehensive groundwater exploration is underway, which will identify potential future well locations for additional water supply. The Environmental Assessment is anticipated to be complete in Q3 2020. Nobleton is currently serviced by groundwater, since the connection to the York Water System (surface water) is not permitted due to the Greenbelt Legislation, which precludes lake-based servicing for communities in the greenbelt.

Over the last year, a System Capacity Optimization Study and Hydraulic Analysis were completed for both the water and wastewater system. This analysis provides the status of the existing system, and will inform alternatives for the Environmental Assessment study. The Assimilative Capacity Study for the Humber River has been extended to include additional sampling under various rain events to better understand the current phosphorus levels in the river. The first Public Consultation Centre is scheduled Q2 2019.

## **Richmond Hill/ Langstaff Gateway water and wastewater servicing design is nearing completion**

Design of the required water and wastewater infrastructure through a complex utility corridor along Highway 7 is nearing completion. Final construction permit approval applications are being prepared with approvals anticipated by the end of 2019. Property acquisition of 22 temporary and permanent easements is currently underway with anticipated completion in late 2019. It is expected that the tender documents for this infrastructure will be released by the end of 2019 pending completion of property acquisition. Commissioning of water and wastewater infrastructure is currently programmed for 2025 (last reported: 2025). Timing of this work will be revisited during the 2019 budget development. Until then, capacity is available to match the transportation growth triggers for the service area. The project will provide additional water and wastewater servicing capacity to accommodate anticipated growth up to 2051 in Richmond Hill and Markham of 39,425 persons..

## **Sutton Water Resource Recovery Facility average flow well below plant capacity**

The existing Sutton Water Resource Recovery Facility was commissioned in 2003 with an original design capacity to service 7,500 people. An Environmental Assessment for plant expansion to service up to 13,500 people was completed in 2010.

The Region continues to monitor plant flows, and future capacity expansion will be brought into the 10 year capital plan when the flow reaches 70 per cent of the plant capacity. Currently, the plant is operating at 50-60 per cent capacity.

Construction of a plant optimization project is underway with detailed design complete and construction commencing in early 2019. This work includes construction of an equalization tank to address peak flow processing challenges and the new tank will subsequently serve

as a process tank in future capacity expansion. All regulatory permits have been acquired and completion of this project is anticipated by 2021. This does not change the capacity of the plant.

## **PEEL AND TORONTO COST-SHARED PROJECTS**

### **Region's long-term servicing strategy includes Peel and Toronto cost-shared projects**

Provision of water and wastewater services through partnerships with the City of Toronto and Peel Region is a key component of the Region's long-term servicing strategy. York Region staff conduct regular meetings with City of Toronto and Peel Region staff to discuss issues regarding servicing commitments, including cost-shared project delivery schedules. Both Peel and Toronto are on track to meet their long-term water supply agreement commitments to York Region.

### **Peel cost-shared projects progressing as expected**

York Region has secured 331 MLD in supply and transmission capacity from Peel Region. Based on York Region's Water and Wastewater Master Plan Update, water supply from Peel Region combined with water supply from City of Toronto will service growth to year 2031 and beyond.

There are currently four water and two wastewater cost-shared projects underway in Peel Region. The Lakeview Water Treatment Plant Expansion and Lorne Park Water Treatment Plant Expansion were completed in 2018 and are currently under warranty. Construction of both the Lakeview Water Treatment Plant Standby Power and Hanlon Feedermain are ongoing with commissioning scheduled in Q2 2019. As for wastewater projects, the Lakeview Wastewater Treatment Capacity Expansion to benefit York Region was completed in 2018. Additional work is ongoing to optimize existing plant capacity to be completed in 2022.

### **Hanlan Feedermain projects are scheduled to be commissioned by Q2 2019**

Completion of the 12-kilometre Hanlan Feedermain requires five separate contracts, of which four have been released. Contracts 1 (tunnelling) and 2 (open cut) for the new 2400mm diameter pipe are complete and in warranty period. Contract 3 (open cut/tunnelling) is in construction and currently in final restoration and scheduled to be completed in Q2 2019 (last reported: Q4 2018). The additional time to complete Contract 3 will not impact service commitments to York Region. Contract 4, commissioning of the entire newly constructed Hanlan Feedermain has been awarded and will also be completed in Q2 2019 (last reported: late 2018, delayed as a result of Contract 3). The final phase of work to interconnect the new feedermain to the existing feedermain, which is Contract 5, is anticipated for completion in 2020.

## **Toronto cost-shared projects progressing and no impacts to capacity commitment**

There are currently five ongoing Toronto cost-shared projects with three in construction. With the exception of Ellesmere Pumping Station Standby Power Upgrades, all projects in construction are progressing on schedule. The City of Toronto is managing contractual issues on the Ellesmere Pumping Station Standby Power Upgrades. Progress on this project has been limited this year; however, this project is not related to capacity and will not impact water capacity commitments. The project is now anticipated for completion Q3 2020 (last reported: Q4 2018). The remaining projects are on schedule and progressing to planned completion dates:

- Scarborough Watermain Q2 2021 (last reported: 2021)
- Toronto Billing Meter Upgrades Q4 2019 (last reported: Q4 2019)
- Rosehill Pumping Station Standby Power Upgrades Q2 2020 (last reported: 2020)
- West Toronto and Richview Pumping Stations Q4 2021 (last reported: Q4 2021)

## **5. Financial**

### **\$2.5 billion of capital infrastructure works approved in the 2018 Environmental Services Budget for next 10 years**

The 2018 Environmental Services Budget and 10 Year Capital Plan include \$2.5 billion in water, wastewater, waste management, forestry and energy projects. Of the total \$2.5 billion of capital works in the approved 10 Year Capital program, approximately \$1.4 billion is for growth infrastructure in the water and wastewater program, \$989 million for rehabilitation and replacement in the water and wastewater program and \$106 million for waste management, forestry and energy projects. The 2018 Multi-year Capital Spending Authority for Environmental Services infrastructure projects is \$950 million. (This includes the re-profiling that occurred in June 2018.) Additional Capital Spending Authority will be requested annually through the budget process as projects progress and specific requirements are established.

Growth capital work is debt financed and repaid through development charges. Infrastructure management work is paid through the water/wastewater rate. Waste management, forestry and energy are primarily paid through tax levy revenues. As part of the budget process, associated funding and resource requirements for operations and asset management of expanded and complex infrastructure systems are areas of focus informing financial implications of servicing growth. A summary of infrastructure project costs, based on the 2018 approved budget is provided in Table 1.

**Table 1**  
**Cost Estimates for Key Infrastructure Projects**

Project	Estimated Total Project Cost	Remaining Estimated Cost in 10 Year Plan	Anticipated Commissioning Date
Duffin Creek Plant Outfall – Diffusers	\$24.6M	\$17.3M	2021***
Upper York Sewage Solutions Newmarket Forcemain Twinning	\$110.6M	\$101.9M	2021
Upper York Sewage Solutions Water Reclamation Centre*	\$604.0M	\$484.8M**	2026***
West Vaughan Water Servicing	\$3.3M	\$2.6M	2036
West Vaughan Sewage Servicing	\$327.9M	\$217.1M**	2028
Northeast Vaughan Servicing	\$253.2M	\$195.9M**	2028
Richmond Hill/Langstaff Gateway Regional Centre Servicing	\$28.6M	\$26.3M**	2025
Sutton Water Resource Recovery Facility Expansion	\$42.7M	\$2.0M	2033
City of Toronto Cost-Shared Projects	\$314.4M	\$40.5M	Varies
Peel Region Water Cost-Shared Projects	\$580.0M	\$14.3M	Varies
Peel Region Wastewater Cost-Shared Projects	\$66.6M	\$5.8M	Varies
<b>Estimated Total Project Cost and Remaining Budget in 10 Year Plan</b>	<b>\$2355.9M</b>	<b>\$1108.5M</b>	

\*Includes associated linear works and phosphorus offset program

\*\*Cost currently under review as the project advances and will be updated for future budget submissions

\*\*\*Anticipated commissioning dates based on 2018 approved budget; however, timing dependent on approval of Environmental Assessments

### **Managing the longevity of existing infrastructure through comprehensive asset management**

One of Environmental Services' key strategic goals involves proactively managing and maintaining infrastructure to ensure short and long-term reliability and compliance with all regulatory requirements. Accordingly, the department's asset management program monitors the condition and performance of the Environmental Services Department's multi-billion

dollar asset base. Infrastructure rehabilitation and replacement needs to maintain current levels of service are estimated at approximately \$1 billion over the next 10 years. Some of the key projects and programs are as follows: Duffin Creek Incinerator Replacement Project; Southeast Collector Rehabilitation Project; Ductile Iron Watermain Replacement Program; Inflow and Infiltration Reduction Program; Primary Trunk Rehabilitation and Elevated Water Tank Rehabilitation Program. A breakdown of estimated costs for this program area is provided in Table 2 along with other components of the entire capital program.

**Table 2**  
**Cost Estimates for Environmental Services 10 Year Capital Plan**

Project	Remaining Estimated Cost in 10 Year Plan (2018 - 2027)
Key Infrastructure Projects (as detailed in Table 1)	\$1108.5M
Other Water Growth Capital Projects	\$110.6M
Other Wastewater Growth Capital Projects	\$188.2M
Water Rehabilitation/Replacement	\$338.5M
Wastewater Rehabilitation/Replacement	\$686.6M
Waste Management	\$78.2M
Natural Heritage and Forestry	\$16.5M
Energy Management	\$12.3M
<b>TOTAL</b>	<b>\$2,539.4M</b>

### **Region received \$34.8 million in Clean Water and Wastewater Funding approval for 29 projects**

In October 2016, the Region submitted an application for 29 potential projects to the Clean Water and Wastewater Fund and received funding approval in the amount of \$34.8 million for all submitted projects. This program is offered through Infrastructure Canada with the objective of accelerating immediate improvements to water distribution and treatment infrastructure with a focus on leveraging innovation opportunities. Of total approved funding, 85 per cent was allocated toward four key water and wastewater projects:

1. York Durham Sewage System Sewer Rehabilitation
2. Water Transmission Main Replacement
3. Phosphorus Offset Program and Membrane Filtration Demonstration Projects
4. Duffin Creek Plant Field Testing for Phosphorus Removal Study

The original deadline to complete these works was March of 2018. As of January 2018 Infrastructure Ontario has issued an extension on the deadline for completion of these

projects to March of 2020. Staff anticipate meeting all requirements of the program criteria to realize the full funding amount.

### **Development charge collections need to increase beyond forecasts to move growth-related capital projects forward**

Growth-related water and wastewater projects are funded with development charges. The project timelines established in the 2018 Capital Plan are contingent on the Region achieving its growth and development charge collection projections. If forecast development charge collections are not achieved, the Region may need to revisit its capital plan commitments.

## **6. Local Impact**

### **York Region continues to work closely with local municipalities affected by capital works program to facilitate planned community growth**

Priority projects detailed in this report are crucial to providing timely servicing capacity to municipalities. This water and wastewater capacity is necessary to meet growth expectations while maintaining a high level of environmental and public health protection.

### **Additional servicing capacity for development is created through timely completion of key infrastructure projects**

Release of additional capacity, as well as granting of approvals in each phase of the approval process, is contingent on projects being completed as planned. Projects are continually monitored to ensure that risk of delay is mitigated where possible and capacity made available. Staff continues to collaborate with local municipalities to ensure impacts to planned community growth are minimized to the extent possible considering any capacity constraints created by the current implementation schedule for these projects. A collaborative approach with local municipalities will continue to assist with reporting on their local capacity allocation in a timely manner to both support their own respective capacity allocation and future growth commitments but also the Regional capacity assignment to ensure fiscal sustainability.

## **7. Conclusion**

### **\$2.5 billion proposed 10 Year Capital Plan includes required projects for current and future capacity assignments**

This report provides Council with a status of priority projects within the 10 Year Capital Plan and its relationship to timing of servicing capacity. Continuing to monitor these projects will

ensure that both capacity allocation and granting of planning approvals are synchronized with project delivery schedules. The 2018 10 Year Capital Plan includes critical projects required to provide capacity to service future growth. Staff will report back to Council in Q3 2019 on servicing capacity for all municipalities serviced by the York Durham Sewage System. Where applicable, staff will continue to optimize the water and wastewater networks through water conservation, inflow and infiltration reduction and other capacity monitoring programs to ensure we maximize potential from existing Regional systems. The Region will continue to monitor development charge collections. Also, where appropriate, the Region will continue to look for other funding sources.

---

For more information on this report, please contact Mike Rabeau, Director, Capital Planning and Delivery, Environmental Services at 1-877-464-9675 ext. 75157.

The Senior Management Team has reviewed this report.

Recommended by:

**Erin Mahoney, M. Eng.**  
Commissioner of Environmental Services

Approved for Submission:

**Bruce Macgregor**  
Chief Administrative Officer

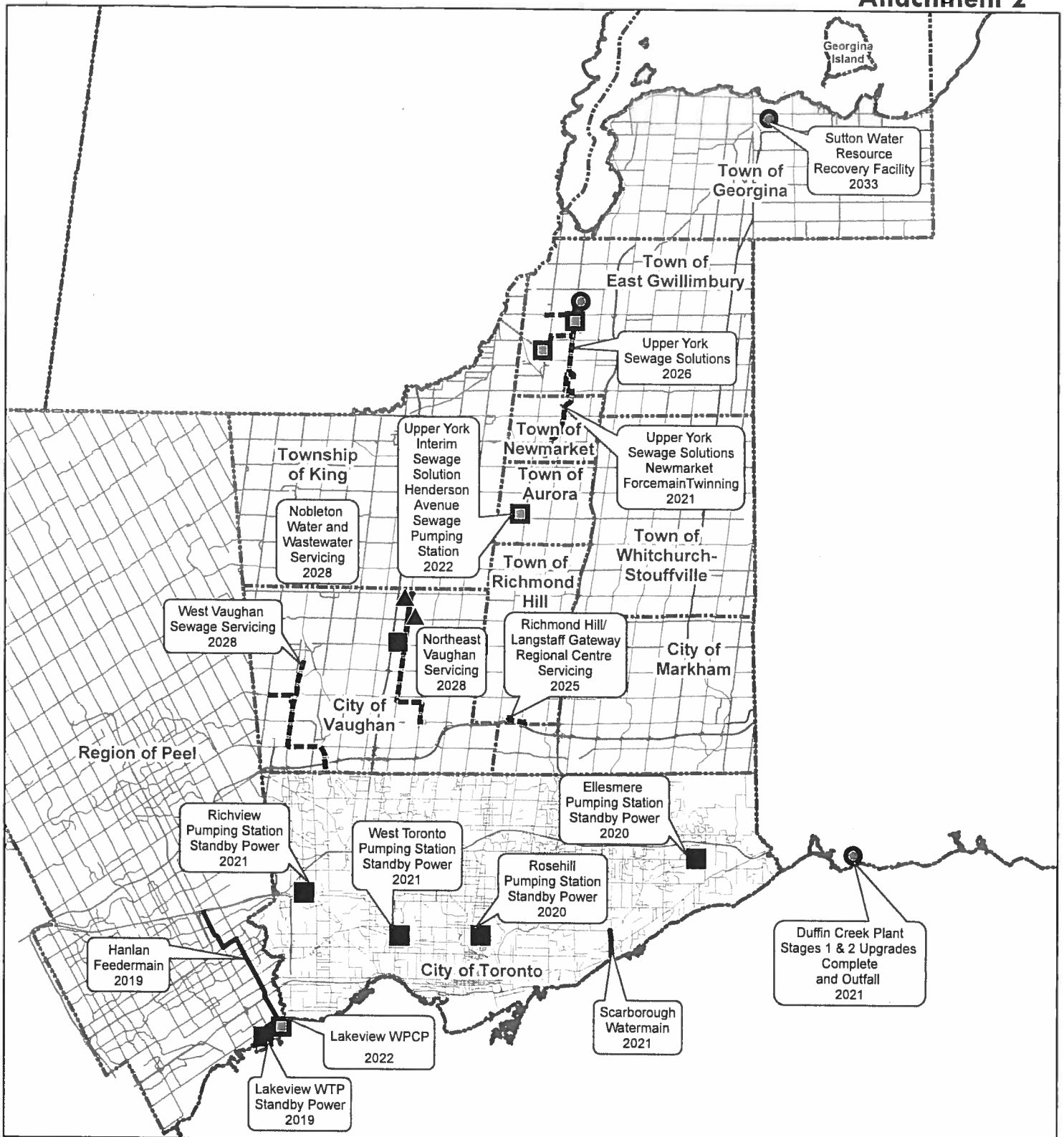
December 13, 2018  
Attachments (2)  
#8781082



### Status of Key Infrastructure Projects

Project Name	Description	Current Status	Expected Project Commissioning Date
Duffin Creek Plant Stages 1 & 2 Upgrades	Upgrade and refurbish existing Stages 1 & 2	Construction	Complete
Duffin Creek Plant Outfall	EA to address diffusion requirements and increase outfall capacity to 630MLD	Class Environmental Assessment	2021 (timing dependent on Outfall EA approval)
Upper York Sewage Solutions	Water Reclamation Centre with associated linear works and phosphorus off-set program	Detailed Design	2026 (timing dependent on Upper York Sewage Solutions Individual Environmental Assessment approval)
	Newmarket Forcemain Twinning	Detailed Design	2021 (approval through Declaration Order)
	Interim Infrastructure Solutions	Class Environmental Assessment	2022
West Vaughan Sewage Servicing	Sanitary servicing solution to accommodate growth in West Vaughan area	Detailed Design	2028 (last reported: 2028)
Northeast Vaughan Servicing	Water and wastewater servicing solution to accommodate growth in East Vaughan	Class Environmental Assessment	2028 (last reported: 2028)
Richmond Hill/Langstaff Gateway Regional Centre	Water and wastewater servicing solution to accommodate growth	Detailed Design	2025 (last reported: 2025)
Sutton Water Resource Recovery Facility	Expansion of existing facility to accommodate growth in Sutton	Detailed Design	2033 (last reported: 2033)





## LOCATION PLAN Key Infrastructure Projects

Environmental Services Water and Wastewater  
January 10, 2019

Produced by: The Regional Municipality of York  
Infrastructure Asset Management Branch, Environmental Services Department December 2018

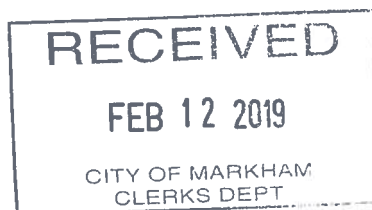
Data Sources:  
© Copyright, The Regional Municipality of Peel and City of Toronto  
See York.ca for disclaimer information.

York Region yorkmaps



## Legend

- Priority Water Projects and estimated completion year
- Priority Wastewater Projects and estimated completion year



Corporate Services  
Regional Clerk's Office

February 1, 2019

Ms. Kimberley Kitteringham  
City Clerk  
City of Markham  
101 Town Centre Boulevard  
Markham, ON L3R 9W3

Dear Ms. Kitteringham:

**Re: Traffic and Pedestrian Signal Policy Review of Atypical Requests**

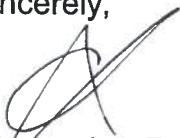
On January 31, 2019 Regional Council adopted the following recommendation:

1. The Regional Clerk circulate this report to the local municipalities.

The original staff report is enclosed for your information.

Please contact Joseph Petrungaro, Director, Roads and Traffic Operations at 1-877-464-9675 ext. 75220 if you have any questions with respect to this matter.

Sincerely,



Christopher Raynor  
Regional Clerk

Attachment

# **The Regional Municipality of York**

Committee of the Whole  
Transportation Services  
January 10, 2019

Report of the  
Commissioner of Transportation Services

## **Traffic and Pedestrian Signal Policy Review of Atypical Requests**

### **1. Recommendations**

1. The Regional Clerk circulate this report to the local municipalities.

### **2. Summary**

This report is in response to Council's request to review atypical situations for the installation of traffic and pedestrian signals. Atypical situations occur when numerical warrants are only met on an occasional, infrequent or non-typical day such as a holiday or special event. The current Council-approved policy already allows for consideration of atypical situations where numeric warrants are not met, therefore, staff is not recommending a change to the Traffic and Pedestrian Signal Policy.

### **3. Background**

#### **Council requested staff consider policy implications associated with atypical situations where traffic and pedestrians signals are requested**

On March 29, 2018, a report was presented to Council recommending traffic signals not be installed at the intersection of Teston Road and Mosque Gate, in the City of Vaughan. The numeric warrants for traffic signals, which form the Region's Traffic and Pedestrian Signal Policy, were not met in this situation. Council deferred the report recommendation pending a supplementary staff report to consider atypical situations when traffic and pedestrian signals may be requested but where numeric warrants are not met.

## **The Region has a policy in place to evaluate when traffic and pedestrian signals are required**

In 2015, Council adopted an updated Traffic and Pedestrian Signal Policy, which directly references the Ontario Traffic Manual (OTM) Book 12, entitled “Traffic Signals”, published by the Ministry of Transportation of Ontario. OTM Book 12 guidelines provide criteria for using a consistent province-wide approach to evaluate technical justification for traffic and pedestrian signals. The criteria are based on typical traffic volumes and delays, pedestrian volumes and collision history. OTM Book 12 represents best practice in North America.

Since 2015, the Region has evaluated approximately 525 intersections responding to requests for installation of traffic or pedestrian signals. These have resulted in:

- 478 intersections where the numeric warrants for traffic or pedestrian signals were not satisfied
- 43 Intersections where the numeric warrants for traffic or pedestrian signals were satisfied
- Two locations did not satisfy the numeric warrants for traffic or pedestrian signals but were recommended by staff and approved by Council based on intersection specific geometric conditions
- Two locations did not meet the numeric warrants for traffic signals and were not recommended by staff; however, Council approved the installations at the cost of the requestors

## **Traffic control signals may not be suitable for all locations**

Traffic signals are necessary when traffic volumes on two intersecting roads are such that an automated system is required to promote orderly movement of traffic, or when the roadway environment creates a potential for undue hazard, such as limited sight lines. Traffic signals that are appropriately located also facilitate pedestrian and cyclist crossings.

While traffic signals may provide some potential benefits, there are other factors that need to be carefully considered prior to installing new traffic signals. By design and function, traffic signals increase delays and queues to traffic on major streets. This can lead to motorist frustration and aggressive driver behavior. Long queues due to signal delay can also block adjacent intersections, accesses and sidewalks. Further, traffic signals may not improve safety, as they can increase the frequency of rear-end type collisions.

## 4. Analysis

### **Municipalities surveyed in southern Ontario are consistent in evaluating the need for traffic and pedestrian signals**

Staff surveyed several regional and local municipalities in southern Ontario to compare approaches used to evaluate the need for traffic and pedestrian signals. All 25 respondents, including the nine local municipalities in the Region, identified that OTM Book 12 is used for this purpose. Municipal councils may, however, make exceptions. In some cases, situations are addressed through direction of the applicable council.

### **Atypical considerations have a variety of characteristics**

At times, atypical situations are cited in a request for traffic signals. These requests include intersection-specific inconsistencies and characteristics that cannot be crafted into a revised policy. By definition, there are no reasonable common technical principles to define an atypical situation.

Requests for traffic and pedestrian signals based on atypical operating conditions may originate in different locations throughout the Region. This may occur when a location may satisfy the numeric warrants on a special day, or only for a few occasions per year. Such situations may exist in the vicinity of community centres, recreational facilities, places of worship and retail centres. If traffic and pedestrian signals are installed where they are not regularly required, there may be an unnecessary increase in delays to traffic.

### **Current policy allows for staff to initiate traffic or pedestrian signals where numeric warrants are met**

Staff has delegated authority to install traffic and pedestrian signals when an intersection has met the numeric warrants. The policy identifies that the traffic and pedestrian volumes used when evaluating the need for traffic or pedestrian signals be representative of the volumes likely to be experienced on an average day, i.e. the typical operating conditions. Locations are evaluated using the eight busiest hours of the day to reflect travel during typical morning, midday and afternoon peak periods. Data is usually collected on a Tuesday, Wednesday or Thursday as these days are generally representative of recurring operating conditions.

### **Current policy allows staff to recommend to Council for consideration traffic and pedestrian signal installations based on other criteria**

The current policy does allow staff to recommend to Council for consideration installation of signals where numeric warrants are not met. In some cases, an intersection may not meet the technical justification, but installation may prove beneficial based on engineering merit, such as geometric conditions or sight lines and professional

experience. In these circumstances, staff may recommend Council approve installation of traffic or pedestrian signals. Examples of this include:

- In 2017, a pedestrian signal was recommended by staff and approved by Council on Mulock Drive in the Town of Newmarket, in front of Newmarket High School. Limited sight distance was a concern for pedestrians crossing Mulock Drive.
- In 2018, a traffic signal was recommended by staff and approved by Council on Mount Albert Road and Centre Street in the Town of East Gwillimbury. Insufficient visibility was the key concern due to the road geometry.

### **Current policy also allows Council to approve other installations of traffic and pedestrian signals**

Under the current policy, Council approved two traffic signal installations where numeric warrants were not satisfied and installation was not recommended by staff. Both installations were approved on the condition they were funded by the requesting parties; the Township of King and Country Day School, namely:

- In 2017, Council approved installation of a traffic signal at the intersection of King Road at Greenside Drive in the Township of King
- In 2018, Council approved installation of a traffic signal on Dufferin Street at the entrance to the Country Day School in the Township of King

## **5. Financial**

The cost to install traffic signals at a typical four-approach intersection is approximately \$200,000. Costs could be significantly higher if geometric improvements at the intersection are necessary. In some cases, installation of traffic signals requires lane or roadway realignment, addition of turning lanes, concrete medians or property acquisition. Annual operating costs are approximately \$7,800.

The Region's Traffic and Pedestrian Signal Policy stipulates funding of traffic or pedestrian signals at private entrances are at the expense of the private property owner and are not eligible for development charge credit.

In cases where unwarranted signals have been installed on Regional roads, Council's practice has been to approve installation conditional upon costs being recovered from the party requesting the installation.

## 6. Local Impact

This information has been shared with the local municipalities and they are supportive of the Region's Traffic and Pedestrian Signal Policy.

## 7. Conclusion

The Region's current Traffic and Pedestrian Signal Policy is based on provincial guidelines and criteria that are used consistently by municipalities in Ontario. Traffic and pedestrian volumes used in evaluations should be representative of what is likely to be experienced on an average day, exhibiting typical operating conditions.

The current policy, as approved by Council, already allows for consideration of atypical situations where numeric warrants are not met, by both staff and Council. In light of the difficulty of developing consistent principles to address the variety of atypical characteristics, staff does not recommend further policy changes. Staff suggests that the existing policy criteria remain in place, adhering to the principles of Ontario Traffic Manual Book 12, with atypical situations continuing to be subject to Council review.

---

For more information on this report, please contact Joseph Petrungaro at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.

Recommended by:

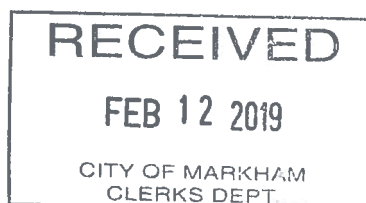
**Paul Jankowski**  
Commissioner of Transportation Services

Approved for Submission:

**Bruce Macgregor**  
Chief Administrative Officer

December 14, 2018

8869418



Corporate Services  
Regional Clerk's Office

February 1, 2019

Ms. Kimberley Kitteringham  
City Clerk  
City of Markham  
101 Town Centre Boulevard  
Markham, ON L3R 9W3

Dear Ms. Kitteringham:

**Re: Inclusion Charter for City of Markham**

On January 31, 2019 Regional Council received your communication dated September 24, 2018.

Sincerely,

A handwritten signature in black ink, appearing to be "CR" or "Chris Raynor", written over a horizontal line.

Christopher Raynor  
Regional Clerk



September 24, 2018

**Christopher Raynor**  
Regional Clerk  
Regional Municipality of York  
17250 Yonge Street  
Newmarket, ON L4P 1L3

**RE: INCLUSION CHARTER FOR CITY OF MARKHAM (11.0)**  
[Presentation](#) [Report](#)

Dear Mr. Raynor;

This is to advise that Council, at its meeting held on September 12, 2018, adopted the following resolution:

- 1) That the presentation entitled “Markham’s Inclusion Charter” be received; and,
- 2) That Council endorse the Inclusion Charter for Markham, set out in this report; and,
- 3) That the Clerk circulate this report, for information, to local municipalities, York Region, The Race Relations, Seniors, Youth Council and Accessibility Advisory Committees, the York Region Accessibility Advisory Committee, the York Regional Police Services Board, Community Partnership Council and the Municipal Diversity and Inclusion Group; and further,
- 4) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

For background information, please see the hyperlink contained in the subject of this letter. If you have any questions, please contact Cheryl McConney-Wilson at 905-477-7000 ext. 2557.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kimberley Kitteringham'.

Kimberley Kitteringham  
City Clerk

cc: All York Region Municipalities  
York Regional Police Services Board  
Frank Scarpitti, Co-Chair, Community Partnership Council  
Nella Iasci, Co-Chair, Community Partnership Council  
Sandra Tam, Community Partnership Council  
Kim Adeney, Municipal Diversity and Inclusion Group (MDIG) and York Region Accessibility  
Advisory Committee  
Lisa Gonsalves, MDIG  
Insp. Ricky Veerapan MDIG



**FIFTH MEETING OF THE  
2019 BUDGET COMMITTEE  
COUNCIL CHAMBER, MARKHAM CIVIC CENTRE  
February 5, 2019  
9:00 AM**

**MINUTES**

**Attendance:**

<p><b>Members Present:</b> Councillor Amanda Collucci, Budget Chief Councillor Andrew Keyes, Vice-Chair Deputy Mayor Don Hamilton Councillor Karen Rea Councillor Keith Irish Councillor Reid McAlpine Councillor Khalid Usman</p> <p><b>Guests:</b> Mayor Frank Scarpitti Regional Councillor Jack Heath Regional Councillor Jim Jones Councillor Isa Lee</p> <p><b>Regrets:</b> None</p>	<p><b>Staff Present:</b> Andy Taylor, Chief Administrative Officer Trinela Cane, Commissioner of Corporate Services Brenda Librecz, Commissioner of Community &amp; Fire Services Arvin Prasad, Commissioner of Development Services Catherine Conrad, City Solicitor Dave Decker, Fire Chief Phoebe Fu, Director of Environmental Services Morgan Jones, Director of Operations Brian Lee, Director of Engineering Joel Lustig, Treasurer Graham Seaman, Director of Sustainability Regan Hutcheson, Manager of Heritage Planning Andrea Tang, Senior Manager of Financial Planning Bryan Frois, Chief of Staff George Duncan, Senior Planner Veronica Siu, Senior Business Analyst Laura Gold, Council/Committee Coordinator</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

The Budget Committee convened at 9:02 am with Councillor Amanda Collucci in the Chair.

**1. Approval of the Minutes**

**Moved by Andrew Keyes**

**Seconded by Khalid Usman**

**That the Minutes from the January 22, and 29, 2019 Budget Committee Minutes be approved as presented.**

**Carried**

**2. Review of the Capital Budget**

## Budget Committee

February 5, 2019

2 | Page

Operation-Fleet Capital Budget Items

Morgan Jones, Director of Operations was in attendance to answer questions on the Operations-Fleet Capital Budget Items.

Item	Total Cost	Discussion
19204 Corporate Fleet Growth-Non-Fleet	\$10,200	
19205 Fleet Refurbishing	\$37,000	
19206 Corporate Fleet Replacement – Fire	\$1,911,700	<p>Committee inquired if Fire Fleet can be purchased from a Canadian Supplier and if the City is protected against the supplier going out of business.</p> <p>Staff advised that fire vehicles are purchased from the United States due to favourable pricing. It was noted that many of the Canadian suppliers have gone out of businesses.</p> <p>Staff also advised that the City pays for fire vehicles in installments.</p>
19207 Corporate Fleet Replacement – Non-Fire	\$2,883,300	<p>A Committee Member asked for an overview of the process staff undertake to determine if a vehicle needs to be replaced. They also asked for the percentage of the City's fleet that is typically replaced each year.</p> <p>Staff provided an overview of the process they undertake to determine if a vehicle needs to be replaced, noting the condition assessment confirms the need for replacement. Government grants and incentives are also taken into consideration when determining the optimal time to replace a vehicle.</p>
19208 Green Fleet Business Plan and Strategy	\$101,800	<p>A Committee Member inquired why a consultant is needed to determine which vehicles to purchase.</p> <p>Staff advised that a consultant is required to determine which vehicles and handheld devices (e.g. lawn mowers) to purchase to meet the City's net zero target. Specialized expertise is required to conduct the study.</p>
19209 Ice Resurfacing Machine Replacement	\$98,300	<p>A Committee Member inquired if the ice resurfacing machine needs replacement.</p> <p>Staff advised that a condition assessment was done and confirmed the need for replacement in 2019.</p>
19211 New Fleet –Fire (Ground Cover Firefighter)	\$44,800	
19212 New Fleet (Markham Centre)	\$1,420,200	This item was removed from the 2019 Capital Budget. The item will be re-introduced when plans for the Markham Centre Fire Station are presented to the General Committee.

Budget Committee

February 5, 2019

3 | Page

Item	Total Cost	Discussion
		Committee requested that staff's plans for the Markham Centre Fire Station be presented to the General Committee early on in the planning process so that Members of Council can provide input and feedback.
19213 New Fleet –Parks	\$140,100	A Committee Member asked if outsourcing parks work has been a success.  Staff advised that they continue to outsource some of the parks work, but that they continue to make improvements to the pilot project. Currently, the boulevard work is being outsourced so that staff can focus on the maintenance of the sports fields. The savings derived are from not having to purchase the equipment.
19215 New Fleet – Water works	\$32,000	This item was removed from the 2019 Capital Budget, as the truck will now be rented for the summer months.

**Moved by Councillor Don Hamilton****Seconded by Councillor Khalid Usman****That the Budget Committee approve Operations-Fleet Capital Budget Items (excluding 19212 and 19215).****Carried**Operation- Utility Inspection & Survey

Item	Total Cost	Discussion
19216 German Mills Meadow – Northern Header Upgrade	\$456,800	
19217 – Survey Monument Replacement	\$28,600	

**Moved by Deputy Mayor Don Hamilton****Seconded by Councillor Khalid Usman****That the Budget Committee approve the Operation-Utility Inspection & Survey Capital Budget Items.****Carried**

## Budget Committee

February 5, 2019

4 | Page

Operations – Business & Technical Services

Morgan Jones, Director of Operations was in attendance to answer questions and on the Operations-Business & Technical Services Capital Budget Items.

Item	Total Cost	Discussion
19219 Growth Related Parks Improvements	\$167,900	<p>A Committee Member requested that a volley ball net be installed at Alma Walker park.</p> <p>Staff advised that it has not been the City's practice to provide volleyball nets.</p> <p>It was also requested to place more benches at a park in Ward 8.</p> <p>A Committee Member also advised that there is a demand from residents to include tennis courts at new parks.</p> <p>Staff advised that data have been collected through the update of the Integrated Leisure Master Plan. Results will be brought forward to General Committee.</p>
19220 Public Realm – Markham's Shared Places our Places	\$55,200	<p>Committee suggested the cost of the little libraries is too high.</p> <p>After some discussion it was agreed to pilot one little library to see how it functions prior to purchasing any additional units.</p>

**Moved by Deputy Mayor Don Hamilton**

**Seconded by Councillor Andrew Keyes**

**That the Budget Committee approve the Operations-Business & Technical Services Capital Budget Items.**

**Carried**

Environmental Services – Infrastructure

Phoebe Fu, Director of Environmental Services was in attendance to answer questions on the Environmental Services –Infrastructure Capital Budget Items.

Item	Total Cost	Discussion
19222 Small Culverts Replacement (12 Structures)	\$349,200	
19223 Large Culverts Rehab (3 Structures) – Design & Const.	\$442,270	

## Budget Committee

February 5, 2019

5 | Page

Item	Total Cost	Discussion
19224 - MNRF Monitoring for Capital Projects at Water Crossings	\$16,200	<p>A Committee Member asked if a consultant is required to prepare this report.</p> <p>Staff advised that there is a legislative requirement from the Ministry of Natural Resources and Forestry (MNRF) to submit a report every year for 5 years following the completion of capital works at water crossings.</p> <p>Staff do not have the expertise (ecology and fishery) to prepare the report.</p>
19226 - Stormwater Pumping Stations- Maintenance	\$20,700	
19227 - Miscellaneous Requests	\$152,600	
19228 Streetlights – Poles Replacement Program	\$121,800	
19229 Streetlights – Underground Cable Replacement	\$1,178,775	
19230 Structures Program-FTE	\$140,800	Staff explained the funding model for this position. Replacement of structures are funded from the Life Cycle Replacement and Capital Reserve Fund; therefore the dedicated staff responsible for overseeing the program is funded from the same reserve.

**Moved by Councillor Andrew Keyes****Seconded by Keith Irish****That the Budget Committee approve the Environmental Services-Infrastructure Capital Budget Items.****Carried**Environmental Services -Stormwater

Phoebe Fu, Director of Environmental Services was in attendance to answer questions on the Environmental Services –Stormwater Capital Budget Items.

Item	Total Cost	Discussion
19231 Don Mills Channel-Flood Education Proofing Program	\$152,600	<p>A Committee Member was interested in the education program.</p> <p>Staff advised that more information on the education program will be provided after the budget is approved.</p>

## Budget Committee

February 5, 2019

6 | Page

Item	Total Cost	Discussion
		<p>The program will educate local businesses in the area on how to protect their offices from floods.</p> <p>Other measures are also being taken to prevent flooding in the area such as widening the channel to add more capacity.</p> <p>It was noted that the funding for this project comes from the stormwater fee.</p>
19232 Erosion Restoration Program	\$663,900	
19233 Oil Grit Separators (OGS) – Inspection and Cleaning	\$211,300	Staff clarified that this capital budget item is to clean oil that gets into the storm sewers from roadways (such as oil leaks from cars). Staff clarified that oil / fat from residential homes goes to sanitary sewers.
19234 Sewer Invert Data Quality Assurance Year 5 of 5	\$54,000	
19235 Stormwater Facility – Condition Inspection	\$54,000	
19236 SWM Pond Cleaning – Ponds ID#43 & ID#70	\$753,036	<p>A Committee Member inquired about the cost of this project.</p> <p>Staff advised that it is a costly process to remove the sediment from a pond. The cost is based on the volume of the pond. Ponds need to be cleaned approximately every 20 years to avoid a build-up in sediment.</p> <p>Staff advised that the two ponds included in the 2019 Capital Budget are Carlton Village Pond and Civic Centre Pond.</p> <p>A Committee Member inquired if the City collects development charges for the maintenance of stormwater ponds.</p> <p>Staff advised that development charges are collected for the initial construction of the stormwater management pond, and the City is responsible for the maintenance of the pond once the developer transfers it to the City. There is no future development charges collected for the maintenance of the stormwater management ponds.</p>

Budget Committee

February 5, 2019

7 | Page

Item	Total Cost	Discussion
19237 Water Quality Improvements and Geese Control	\$27,000	Committee discussed the City's geese control program. It suggested that staff reach out to other municipalities to research different/new ways to mitigate the impact of geese and report back to the General Committee.
19238 Water Quality Monitoring	\$27,000	

**Move by Councillor Keith Irish****Seconded by Councillor Reid McAlpine**

**That the Budget Committee approve the Capital Budget Environmental Services – Stormwater Capital Budget Items.**

**Carried**Environmental Services – Waste

Phoebe Fu, Director of Environmental Services was in attendance to answer questions on the Environmental Services –Waste Capital Budget Items.

Item	Total Cost	Discussion
<b>19240 Incremental Growth Related Waste Management Vehicles</b>	\$100,000	<p>A Committee Member asked for clarification on this item.</p> <p>Staff advised that the City charges a portion of the waste contract to development charges as a portion of the contract increase is due to growth. This will alleviate the tax funded operating budget.</p> <p>Staff pointed out if the service is done in-house, the City would need to buy additional vehicles, funded from development charges, in order to accommodate growth.</p>

**Moved by Councillor Reid McAlpine****Seconded Councillor Karen Rea**

**That the Budget Committee approve the Environmental Services-Waste Capital Budget Items.**

**Carried**Waterworks

Budget Committee

February 5, 2019

8 | Page

Phoebe Fu, Director of Environmental Services was in attendance to answer questions on the Waterworks Capital Budget Items.

Item	Total Cost	Discussion
19241 Cathodic Protection of Cat Iron Watermains	\$427,800	
19243 CI Watermain and Sanitary Sewer Replacement	\$13,730,800	<p>A Committee Member asked if sewer work is coordinated with other utility work being done.</p> <p>Staff advised that coordination of work is done internally with other departments' work to minimize disruption. External utility companies are advised when the City is doing work.</p>
19244 Water System Improvement –Langstaff Area	\$35,600	
19246 – Curb Box Inspection and Replacement Program	\$392,200	
19247 – Fat Oil and Grease (FOG) Program	\$75,300	<p>A Committee Member questioned if this program duplicates the York Region program.</p> <p>Staff advised that this program is an extension of the York Region Program. It complements the Region's program at the local level (e.g. creating local brochures) and it's not a duplicate.</p>
19249 – Sanitary Sewers - Rehabilitation	\$1,130,600	
19250 – Sewer Push Camera Replacement	\$22,700	
19251 – Wastewater Flow Monitoring – Annual Program	\$152,600	
19254 – Water System Instruments Replacement	\$40,700	
19255 – Watermain Leak Detection Program	\$36,600	

**Moved by Councillor Karen Rea**

**Seconded by Deputy Mayor Don Hamilton**

Budget Committee

February 5, 2019

9 | Page

**That the Budget Committee approved the Environmental Services-Waterworks Capital Budget Items.**

**Carried**

Corporate Wide

Joel Lustig, Treasurer was in attendance to answer questions on the Corporate Wide Capital Budget Item.

Item	Total Cost	Discussion
19256 Corporate Capital Contingency	\$3,539,400	<p>A Committee Member asked for clarification on this item.</p> <p>Staff advised that contingencies on individual capital projects have been consolidated into this project. Once the budget is approved, contingency amounts will be transferred back to individual projects.</p>

**Moved by Councillor Khalid Usman**

**Seconded by Councillor Andrew Keyes**

**That the Budget Committee approve the Corporate Wide Capital Budget Item No. 19256.**

**Carried**

Capital Budget Item No. 19088 Stabilization of Structures

Graham Seaman, Director of Sustainability & Asset Management provided a presentation on Capital Budget Item No. 19088 Stabilization of Structures. A history of the properties on the site was provided.

Committee discussed the following:

- Whether the barn needs to be demolished or if a fence can be put around the barn;
- Move the house to another location now or in the future;
- Sell the house to a resident or business for a nominal amount who will restore the house at their cost;
- Spend more and make the structure usable for the community;
- Spend the minimum to stabilize the heritage home on the property, so that it can be revitalized in the future;

Staff responded to Committee inquiries, advising the following:

- The house requires stabilization now to be in compliance with the City's Keep Markham Beautiful By-Law;
- a fence around the barn will not prevent trespassers from entering the barn ;
- It will cost the City more to restore the house later if the house is not stabilized at this time;

Budget Committee

February 5, 2019

10 | Page

- The cost of restoring the house now for municipal use would be substantially more than stabilizing the home;
- The City may not be able to move the house to the Heritage Estates or another location at this time;
- A Developer would be required to restore the house to a usable state, but not necessarily at this time.

**Moved by Mayor Frank Scarpitti**

**Seconded by Councillor Khalid Usman**

**That the presentation by Graham Seaman, Director of Sustainability & Asset Management on Capital Budget Item No. 19088 on the Stabilization of Structures be received.**

**That the Budget Committee approve Capital Budget Item 19088, as a placeholder; and**

**That staff report back with options on the stabilization of the structures/ plans for the structures on the property prior to spending the funds.**

**Carried**

#### Capital Budget Item No. 19035. Hwy 404 Midlock Crossing

Brian Lee, Director of Engineering provided a presentation on Capital Budget Item No. 19035. Hwy 404 Midlock Crossing.

Committee provided the following feedback on the Capital Budget Item:

- Negotiate the cost sharing agreement further, as Markham's share is too high considering the project benefits everyone (York Region, Richmond Hill; and Markham)
- Accelerate the Markham portion of the project, so that it is completed before growth in the area occurs;

**Moved by Mayor Frank Scarpitti**

**Seconded by Councillor Khalid Usman**

**That staff investigate the following with respect to Capital Budget Item No. 19035. Hwy 404 Midlock Crossing and report back to the Development Services Committee:**

- 1) **Accelerating the Markham portion of the project prior to growth in the area; and,**
- 2) **Negotiating a better cost sharing deal with York Region and Richmond Hill.**

**Carried**

#### Capital Budget Item 19031 Bike Sharing Implementation Plan

Brian Lee, Director of Engineering advised that Capital Budget Item No. 19031 Bike Sharing Implementation Plan has been removed from the 2019 Capital Budget. Capital Budget Item No. 19037 John Street Multi Use Pathway (MUP) Construction

Budget Committee

February 5, 2019

11 | Page

Staff will meet with Councillor Keith Irish prior to the Feb. 8 Budget Committee meeting to discuss this Capital Budget Item. A decision on the item was deferred until after this meeting occurs.

Capital Budget Item No. 19042 Miller Pond Site Preparation and Property Acquisition

Brian Lee, Director of Engineering provided a presentation on Capital Budget Item No. 19042 Miller Pond Site Preparation and Property Acquisition. The funds being requested is for the maximum amount the project will cost.

**Moved by Councillor Reid McAlpine**

**Seconded by Councillor Khalid Usman**

**That the Budget Committee approve Capital Budget Item No. 19042 Miller Pond Site Preparation and Property Acquisition subject to cost sharing with White Owl.**

**Carried**

**3. Next Steps**

Staff requested an additional meeting and that the time of Friday's Budget Committee meeting be extended to complete the review of the 2019 Budget.

**Moved by Councillor Keith Irish**

**Seconded by Councillor Reid McAlpine**

**That the time of the Budget Committee on February 8, 2019 change to 9:00 am – 12:00 pm; and,**

**That a 7<sup>th</sup> Budget Committee meeting be scheduled the week of February, 11, 2019 (3 hours).**

**Carried**

**4. Adjournment**

**Moved by Councillor Khalid Usman**

**Seconded by Councillor Andrew Keyes**

**That the Budget Committee adjourn at 12:43 pm**

**Carried**



**SIXTH MEETING OF THE  
2019 BUDGET COMMITTEE  
COUNCIL CHAMBER, MARKHAM CIVIC CENTRE  
FEBRUARY 8, 2019  
9:00 AM**

**MINUTES**

**Attendance:**

<p><b>Members Present:</b> Councillor Amanda Collucci, Budget Chief Councillor Andrew Keyes, Vice-Chair Deputy Mayor Don Hamilton Councillor Karen Rea Councillor Keith Irish Councillor Reid McAlpine Councillor Khalid Usman</p> <p><b>Guests:</b> Mayor Frank Scarpitti (ex-officio) Councillor Isa Lee</p> <p><b>Regrets:</b> None</p>	<p><b>Staff Present:</b> Andy Taylor, Chief Administrative Officer Trinela Cane, Commissioner of Corporate Services Brenda Librecz, Commissioner of Community &amp; Fire Services Arvin Prasad, Commissioner of Development Services Catherine Conrad, City Solicitor Phoebe Fu, Director of Environmental Services Brian Lee, Director of Engineering Joel Lustig, Treasurer Andrea Tang, Senior Manager of Financial Planning Biju Karumanchery, Director of Planning &amp; Urban Design Larry Pogue, Director of Administration, Markham Public Libraries Michelle Sawh, Manager of Service Delivery, Markham Public Libraries Debbie Walker, Library Strategy &amp; Innovation, Markham Public Libraries Laura Gold, Council/Committee Coordinator</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

That the Budget Committee convene at 9:05 am with Councillor Amanda Collucci presiding as Chair.

**1. APPROVAL OF THE MINUTES**

**Moved by Councillor Khalid Usman**

**Seconded by Councillor Andrew Keyes**

- 1) That the Minutes from the January 29, 2019 Budget Committee be approved as presented; and,**
- 2) That the Confidential Minutes from the January 29, 2019 Budget Committee be approved as presented.**

**Carried**

Budget Committee

February 8, 2019

2 | Page

## **2. MARKHAM PUBLIC LIBRARY BOARD DEPUTATION**

Ben Hendricks, Chair of the Markham Public Library Board provided a presentation on their request to expand Sunday hours at the Cornell Public Library, and Milliken Mills Public Library, at a cost of \$50,366.78. The Board is working towards phasing in longer library hours. The Board believes that expanding library hours generates a significant community benefit. In 2018 the Board introduced longer hours at Angus Glen Public Library, Thornhill Public Library and Aaniin Public Library.

### Discussion

Committee inquired if volunteers could be used to staff the library to extend library hours at Cornell Public Library and Milliken Mills Public Library. Staff advised that collective agreements do not permit volunteers to be used to undertake library staff work. Only skeleton/ minimum staff level would be working the extended hours.

Committee asked when the libraries are the busiest. Staff advised that Saturdays, Sundays, and after school are the libraries busiest times, but libraries are also well utilized during all regularly scheduled library hours.

Committee suggested the Library Board to explore the possibility of funding the incremental cost from its existing budget.

**Moved by Deputy Mayor Don Hamilton**

**Seconded by Councillor Andrew Keys**

- 1) That the Markham Public Library Board investigate the feasibility of funding the incremental cost of \$50,366.78 from its existing budget to expand library hours on Sundays, and,**
- 2) That the Markham Public Library Board report back on the matter.**

**Carried**

## **3. CONTINUATION OF THE REVIEW OF THE CAPITAL BUDGET**

### Capital Budget Item No. 19037 John Street Multi Use Pathway

Brian Lee, Director of Engineering provided a presentation on Capital Budget Item No. 19037 John Street Multi Use Pathway. The presentation displayed the proposed plans for the cycling facilities in Thornhill, and highlighted that the trail is a key part of Markham's Cycling Master Plan.

Peter Miasek, Vice-Chair of the Cycling & Pedestrian Committee spoke in support of Capital Budget Item No. 19037 John Street Multi Use Pathway. He provided the following feedback:

- Cycling network is needed to allow connection to rapid transit;
- Funding of a cycling network is an investment for Markham;
- Markham is falling behind other neighbouring municipalities in developing its active transportation system;

## Budget Committee

February 8, 2019

**3 | Page**

- Need to complete the cycling network in Markham and connect it with other facilities being built by York Region (e.g. Lake to Lake Cycling Route and Walking Trail, and Bayview Multi Use Pathway);
- There is a general lack of cycling facilities in Thornhill; and,
- John Street multi use pathway is a key piece of the City's Cycling Master Plan.

A Committee Member suggested that the funds be re-allocated to a higher priority project. He was concerned that the construction would cause traffic congestion in the area, and that cycling was not a high enough priority for residents living in the area to justify the project. He also suggested allowing residents to ride their bikes on the sidewalks, as an alternative.

Staff advised that the Cycling & Pedestrian Advisory Committee (CPAC) looked at cycling on sidewalks as an option, but after very careful consideration it was deemed too risky for pedestrians and a liability to the City. They also advised that the construction would be phased in overtime to minimize disruption to the community.

Other Committee Members suggested that the funds should be re-allocated to another part of Cycling Master Plan if this project is not approved.

Moved by Mayor Frank Scarpitti

Seconded Councillor Khalid Usman

- 1) That the funds from Capital Budget Item No. 19037 John Street Multi Use Pathway remain in the Capital Budget, as a placeholder; and,
- 2) That a presentation on the Cycling Master Plan be presented at the Development Services Committee; and,
- 3) That Staff bring back a report on the John Multi Use Pathway to the Development Services Committee; and further,
- 4) That if the Project is eliminated or deferred at the Development Services Committee meeting that the funds be reallocated to another section/ aspect of the Cycling Master Plan.

LOST

Moved by Deputy Mayor Don Hamilton

Seconded by Councillor Khalid Usman

**That Capital Budget Item No. 19037 John Street Multi Use Pathway be approved as originally presented.**

**Carried**

Budget Committee

February 8, 2019

4 | Page

Capital Budget Markham Centre Trail Design No. 1962

Brian Lee, Director of Engineering presented Capital Budget Item No. 19262 Markham Centre Trail Design (Phase 1 of 4). Staff showed the different areas of the trail system and the location of this project.

Committee inquired if the design of the trail will be completed at the same time as the Environmental Assessment and how long it will take to build the trail.

Staff advised that the Environmental Assessment is required for the other areas and is not required for this Phase 1. The design of the trail and acquiring the permits from MNRF and the TRCA will take 12-18 months. This will allow the construction to start in 2020. It is anticipated the trail can be completed in one construction season.

**Moved by Mayor Frank Scarpitti**

**Seconded by Councillor Reid McAlpine**

**That Capital Budget No. 1962 Markham Centre Trail Design (Phase 1 of 4) be approved.**

**Carried**

**4. OPERATING BUDGET - BUILDING, PLANNING, ENGINEERING AND OPERATING BUDGET**

Andrea Tang, Senior Manager of Financial Planning presented the Operating Budget for the Building, Planning, and Engineering Departments.

There was a brief discussion on the Waterworks Reserve. Committee was advised that the waterworks reserve study is updated each year to ensure there is enough funds in the reserve for the next 25 years, and that the water rate is increased (if required) to address any gaps in funding.

A Committee Member inquired about the Development Charges Reserve, specifically on the historic reserve balances and how it was managed over the years when the reserve was in a deficit.

Staff agreed to provide more information on the Development Charges Reserve after approval of the 2019 Budget.

Committee also requested that the Operating Budget be presented in more detail when reviewing future budgets.

Staff advised that a process will need to be undertaken to understand the level of detail the Committee would like the Operating Budget to be presented.

Budget Committee

February 8, 2019

5 | Page

**Moved by Deputy Mayor Don Hamilton**

**Seconded by Councillor Reid McAlpine**

**That Staff report back on recommendations/options for the presentation of the 2020 Operating Budget.**

**Carried**

**Moved by Councillor Keith Irish**

**Seconded by Councillor Andrew Keys**

**That the Budget Committee receive the Building, Planning, Designing, Engineering and Waterworks Operating Budgets.**

**Carried**

## **5. ADJOURNMENT**

**Moved by Councillor Andrew Keyes**

**Seconded by Councillor Keith Irish**

**That the Budget Committee adjourn at 12:11 pm.**

**Carried**



**SEVENTH MEETING OF THE  
2019 BUDGET COMMITTEE  
COUNCIL CHAMBER, MARKHAM CIVIC CENTRE  
FEBRUARY 13, 2019  
12:00 PM**

**MINUTES**

**Attendance:**

<p><b>Members Present:</b> Councillor Amanda Collucci, Budget Chief Councillor Andrew Keyes, Vice-Chair Councillor Karen Rea Councillor Keith Irish Councillor Reid McAlpine Councillor Khalid Usman</p> <p><b>Guests:</b> Mayor Frank Scarpitti (ex-officio) Councillor Isa Lee</p> <p><b>Regrets:</b> Deputy Mayor Don Hamilton</p>	<p><b>Staff Present:</b> Andy Taylor, Chief Administrative Officer Trinela Cane, Commissioner of Corporate Services Brenda Librecz, Commissioner of Community &amp; Fire Services Arvin Prasad, Commissioner of Development Services Catherine Conrad, City Solicitor Brian Lee, Director of Engineering Joel Lustig, Treasurer Andrea Tang, Senior Manager of Financial Planning Biju Karumanchery, Director of Planning &amp; Urban Design Morgan Jones, Director of Operations Bryan Frois, Chief of Staff Laura Gold, Council/Committee Coordinator</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

That the Budget Committee convene at 12:05 pm with Councillor Amanda Collucci presiding as Chair.

**1. APPROVAL OF THE MINUTES**

Staff made the following correction to the February 8, 2019 Budget Committee Minutes:

- “Development Fee Reserve” was changed to “Development Charges Reserve” on page 4 of the minutes, under item 4, in paragraphs 3 and 4.

Budget Committee  
 February 13, 2019  
 Page | 2

**Moved by Councillor Andrew Keyes**  
**Seconded by Councillor Keith Irish**

**That the February 5, 2019 Budget Committee Minutes be approved as presented; and,**

**That the February 8, 2019 Budget Committee Minutes be approved as amended.**

**Carried**

## **2. REVIEW OF THE LIBRARY BOARD'S REQUEST TO EXPAND SUNDAY HOURS**

Library hours will be extended at the Milliken and Cornell Libraries using the Library's existing budget, as requested by the Budget Committee. The Library's budget will be monitored closely in 2019 and issues, if any, will be addressed through the 2020 budget process.

**Moved by Councillor Karen Rea**  
**Seconded by Councilor Reid McAlpine**

**That the memorandum by Ben Hendrik's, Chair of the Markham Public Library Board be received.**

**Carried**

## **3. REVIEW OF THE 2019 STAFFING REQUESTS**

Staff advised that Staff undertook a comprehensive review of the staffing requests prior to bringing them forward to the Budget Committee for consideration. A memo and presentation on 2019 staffing requests were included in the agenda package.

## **4. REVIEW OF THE 2019 OPERATING BUDGET**

Andrea Tang, Senior Manager of Financial Planning presented the 2019 Operating Budget.

Committee inquired about the 2019 E3 initiatives totaling \$2M that resulted in a partial offset against operating budget expenditure increases.

### Winter Maintenance

Committee discussed the following with respect to winter maintenance:

- Windrows;
- Neighbouring municipalities winter maintenance programs;
- Prioritization of roadways with respect to winter maintenance;
- Challenges with the deicing of local roads;
- The science of when to put salt on the roads;
- Why sand is not used as part of the City's winter maintenance program;
- Limitations to the City's service level due to the size of its work yard;
- The inspection of the roadways during a winter storm;

## Budget Committee

February 13, 2019

Page | 3

- The time it takes to implement a change to the City's winter maintenance program;
- The tracking of winter maintenance vehicles;
- How resident feedback is used during a winter storm.

Committee recommended that an interactive site tour be planned for Members of Council to visit the works yard during a winter storm event to better understand the City's winter maintenance program. It was also suggested that Vaughan's windrow service be observed in the next winter storm event.

Committee agreed to defer the remainder of the discussion to the winter maintenance workshop, which will be held in spring 2019.

Committee requested that staff present the following at the winter maintenance workshop:

- a chart comparing Markham's winter maintenance service level with other municipalities service level;
- A chart showing different winter maintenance service levels with a breakdown of the costs associated with each service level.

#### Porta Potties at Milne Dam Conservation Park

A Committee Member inquired regarding placing porta potties at Milne Dam Conservation Park during winter months.

Staff advised that they would not proceed with putting porta potties at Milne Dam Conservation Park as they freeze during the winter months.

#### York Region Tax Rate

A Committee Member noted that York Region may add an additional 1% tax rate increase to its proposed 3.37% tax rate increase, to accelerate road construction and transportation improvements in York Region. This is currently being discussed by York Region Council.

#### The Impact of Property Re-Assessment on the Budget

Staff explained 5 ways that can contribute to increases in property taxes: 1. Increase from the Province for education, 2. Increase from the Region of York for Regional services, 3. Increase from the City for local services, 4. property reassessment and 5. Tax shifting reassessment impact to different classes of properties. Staff advised that the average increase in reassessment in Markham is 8.29%. Therefore, properties with an increase in reassessment greater than 8.29% will see a property tax increase for the local portion, and properties with a reassessment lower than 8.29% will have a reduction in the property taxes for the local portion.

#### Committee Direction to Further Reduce the Tax Rate

Staff were directed to look for ways to reduce the tax rate increase to 2% without reducing service levels and to report back to Council on March 19 through the report on 2019 Budget.

**Moved by Mayor Frank Scarpitti**

**Seconded by Councillor Andrew Keyes**

**That the Budget Committee approve a proposed operating budget tax rate increase of 2.07% to be presented at the February 21, 2019 Budget Public Consultation meeting; and,**

**That the 2019 Budget presentation for the public consultation meeting be posted on the City's website on Feb. 13 (presentation from Budget Committee No. 1).**

**Carried**

#### The City's Website

Committee briefly discussed the City's new website. Staff advised that they are still fixing some glitches with the website prior to doing a hard launch of the website.

#### New Recreational Registration Software

Committee suggested that the new recreational registration software should provide residents with more flexibility in regards to when residents can register for a recreational program. It also suggested that the software should be compatible with other City systems.

Staff advised they will circulate a briefing note on the public opinion with respect to registering for recreational programs. They also advised that the City is working towards integrating customer profiles from various City systems.

#### Sidewalk Program – Capital Budget No. 19039 Sidewalk Program

Committee requested that the list of new sidewalks be presented at a future Development Services Committee after staff have prioritized the list and consulted with the local Ward Councillors. Staff advised that the list includes arterial and collector roads and does not include local roads.

#### Thermal Cooling Pilot Project - Capital Budget No. 19047

A Committee Member asked why the City is undertaking this pilot project if stormwater ponds are required by the Ministry of Natural Resources and Forestry to be 3 metres deep.

Staff advised that the purpose of the pilot project is to explore alternative ways to keep the stormwater management pond at a certain temperature without having to make the ponds 3 metres deep for safety reasons. The project is being undertaken in collaboration with the Ministry and the Toronto Region & Conservation Area.

### **5. ADJOURNMENT**

Councillor Amanda Collucci, Budget Chief thanked the Budget Committee, and Staff for their hard work in the review of the 2019 Budget.

Moved by Councillor Keith Irish  
 Seconded by Andrew Keyes

That the Budget Committee adjourn at 2:38 pm

**Carried**

## Seniors Advisory Committee

Tuesday January 8, 2019

3:00 PM – 5:00 PM

Canada Room

### Minutes

**Attendance:**

Satya Arora  
Laila Jiwa  
Arul Rajasingam  
Patricia Anderson  
Almas Mawani  
Gail Leet, Chair  
Anthony Ko  
Alam Muhammad  
Councillor Amanda Collucci

**Regrets:**

Mithan Lal Kansal  
Yash Kapur  
Diane Gabay  
Ramma Chabra, Vice-Chair  
Christine Wong

**Staff:**

Josh Machesney, Elections & Council/Committee Coordinator  
Marta Wrzal, Recreation Coordinator – Programs & Outreach  
Emma Girard, Communications Advisor

Item	Discussion	Action Item
<b>1. Call to Order &amp; Disclosure of Pecuniary Interest</b>	The Seniors Advisory Committee convened at 3:02 PM with Gail Leet presiding as Chair.	
<b>2. Approval of the November 13, 2018</b>	That the November 13, 2018 Seniors Advisory Committee Minutes be approved.	

Seniors Advisory Committee Minutes	Carried	
<b>3. Open Discussion – Role of SAC in 2019</b>	<p>Members reviewed the Committee’s mandate – to educate members so that they can bring back what they have learned and start a dialogue with their respective seniors associations and clubs.</p> <p>Gail Leet, Chair, advised that the only thing currently scheduled for 2019 is the Health Fair. She asked the Committee what else they would like to accomplish in the coming year. She encouraged members to bring forward issues that they hear from their respective seniors communities throughout Markham.</p> <p>Councillor Collucci suggested that the Committee get better representation of seniors to sit on the Committee, including leaders of all respective seniors clubs and communities within Markham. This would help the Committee reach members of more seniors clubs and associations.</p> <p>Gail encouraged members to suggest speakers and agenda topics for future committee meetings.</p> <p>Emma suggested that Members share the most important seniors-related topics to them, with the Committee, so that the Committee can focus on these issues in 2019. Some of the issues outlined were:</p> <ul style="list-style-type: none"> <li>- What happens when seniors cannot live at home anymore?</li> <li>- Accessible housing availability for seniors.</li> <li>- What social programs are available to seniors and how are they communicated to seniors within Markham?</li> </ul> <p>It was suggested that the Committee consider hosting a “Coffee Club”, like is done by some seniors groups in the community. Marta advised she will meet with staff at Cornell to get more information regarding contacts, costs, and logistics of setting up “coffee club-like” workshops, and report back to</p>	

	the Committee so they can make an informed decision as to whether this would be something the Committee wishes to undertake.	
<b>4. New Business</b>	Anthony announced that Markham YMCA will be hosting a Chinese New Year Celebration on February 1 <sup>st</sup> , 2019. The public is welcome.	Anthony to send Josh the flyer for distribution to Committee members.
<b>5. Adjournment</b>	The meeting adjourned at 4:38 PM	

## AGENDA 2.1

### MARKHAM PUBLIC LIBRARY BOARD

#### Regular Meeting

**Minutes of Meeting held on Monday, December 17, 2018 7:07 p.m. Markham Village Library, Program Room, 6031 Highway 7 East, Markham L3P 3A7**

Present from Board: Mr. Ben Hendriks, Chair  
Ms. Aida DaSilva  
Ms. Margaret McGrory  
Mrs. Lillian Tolensky  
Mrs. Pearl Mantell  
Mrs. Marilyn Aspevig  
Mrs. Yemisi Dina  
Mr. Alfred Kam  
Regional Councillor Joe Li

Present from Staff: Mrs. Catherine Biss, CEO & Secretary-Treasurer  
Ms. Deborah Walker, Director, Strategy & Innovation  
Mr. Larry Pogue, Director, Administration  
Ms. Andrea Cecchetto, Manager, Learning & Growth  
Mrs. Diane Macklin, Manager, Marketing & Community Development  
Ms. Michelle Sawh, Manager, Service Delivery  
Mr. Ben Shaw, Project Coordinator Workforce Development  
Mr. Shaun McDonough, Research Analyst  
Ms. Megan Garza, Manager, Aaniin Branch  
Mrs. Susan Price, Board Secretary

Regrets: Regional Councillor Jack Heath  
Mr. Alick Siu  
Councillor Alan Ho  
Ms. Jennifer Yip

#### 1.0 **Call to Order/Approval of Agenda**

Mr. Ben Hendriks, Chair, called the meeting to order at 7:07 p.m.

Moved by Mrs. Marilyn Aspevig  
Seconded by Ms. Aida DaSilva

**Resolved that the agenda be approved.**

Carried.

#### 1.1 **Declaration of Conflict of Pecuniary Interest**

None.

## AGENDA 2.1

### 1.2 Delegation

None.

### 1.3 Chair's Remarks

#### CHAIR'S INDIGENOUS LAND ACKNOWLEDGMENT

Before we begin today's meeting, we would like to give acknowledgment to the traditional land we are grateful to have the opportunity to gather on today. We acknowledge our presence on the traditional territory of many Indigenous Nations who have and continue to call this territory home including the Wendat, Anishnabek Nation, the Haudenosaunee Confederacy, the Mississaugas of Scugog, Hiawatha, Alderville First Nation and the Metis Nation.

Mr. Hendriks noted that it has been in the news that there are several indigenous murder investigations being reopened and that thanks to people like Tanya Talaga and the work she is doing, this is happening.

The Chair mentioned that they should organize a Board get together in January and Mrs. Tolensky offered to organize the event.

Mr. Hendriks reminded the Board that this week would be the last chance for Board Members to sign up for the OLA Conference.

The Chair told the Board that there would not be Board elections in January, this will be done when a new Board is formed and that the Board meeting dates for 2019 are in the package.

He reminded the Board that the meeting would have to end by 8:45 in order for staff to set up the room for Study Halls commencing at 9:00 pm.

### 2.0 Consent Agenda:

The Chair commented that it was good to see the donations for Honour with Books in 2018.

Moved by Mrs. Pearl Mantell  
Seconded by Mrs. Lillian Tolensky

**Resolved that the Consent Agenda comprising Agenda items 2.0 to 2.3. 5 and the same are hereby approved as written and the CEO of the Library is hereby authorized and directed to take such action that may be necessary to give effect to the recommendations as therein contained:**

- 2.1 Minutes of Regular Meeting, November 26, 2018**
- 2.2 Declaration of Due Diligence by the CEO**
- 2.3 Communication and Correspondence:**
  - 2.3.1 The Star: With Aaniin Community Centre, public space finally comes to Markham**
  - 2.3.2 What's Happening at MPL This December**
  - 2.3.3 Toronto Public Library: Self-Service Initiative**
  - 2.3.4 Globe and Mail: Ottawa is building a new central library...**
  - 2.3.5 Honour with Books 2018**

Carried.

## AGENDA 2.1

### 3.0 **CEO's Highlights, December 2018:**

The Chair asked the CEO to comment on the report.

The CEO advised that the Council's Operating Budget review would take place February 5, 2019 and that if the Board wished to open additional Sunday hours in 2019, they would need to make a presentation to Council at that meeting.

It was noted that the report "Contract Extension" for Markham Public Library Material & Processing be extended for an additional year, was received and approved by Council and that the extension be funded, subject to Council approval of the 2019 capital Budget.

Mr. Hendriks commented on the Toronto Social Capital Study and how it also applies to Markham. "Social capital is defined as: The vibrancy of social networks and the extent to which there is trust and reciprocity within a community and among individuals. It is the essential lubricant" that makes it possible for societies to function, and for people to get along peacefully even when they have little in common".

Moved by        Mrs. Yemisi Dina  
Seconded by    Ms. Aida DaSilva

**Resolved that the report entitled "CEO's Highlights, December 2018" be received.**

Carried.

### 4.0 **Annual Monthly Policy Review:**

The Chair asked Board members to review the policies that are in the package and bring forward any proposed changes at the January meeting.

Moved by        Mrs. Lillian Tolensky  
Seconded by    Mrs. Marilyn Aspevig

**Resolved that all the policies under Governance Process and Board-CEO Linkage sections of the Governance Policies and EL Policies be reviewed and that proposed amendments be presented to the Board at its regular meeting in January 2019 if required.**

Carried.

### 5.0 **Internal Monitoring Reports:**

(Compliance list of internal monitoring reports and discussion led by members.)

### 5.1 **Executive Limitation: EL-2f, Protection of Services** **(Assigned to Ms. Aida DaSilva)**

Ms. DaSilva received one question asking why the additional hour on Friday evenings at all locations was not in the report. The CEO confirmed that this should have been included in the report and was duly noted. The expansion of service in 2018 has been managed within MPL's operating budget, however any additional hours will require additional funding.

## AGENDA 2.1

There were no more questions.

The report confirmed that the CEO and MPL's practices relative to MPL's Protection of Services comply with the requirements of EL-2f policy.

Moved by Ms. Aida DaSilva  
Seconded by Ms. Margaret McGrory

**Resolved that the report entitled "Internal Monitoring Report- Executive Limitation EL -2f, Protection of Services" be received.**

Carried.

### 6.0 Ends

### 7.0 Governance:

#### 7.1 Revised By-laws (November 2018)

Moved by Mrs. Pearl Mantell  
Seconded by Mrs. Marilyn Aspevig

**Resolved that the Board receives the revised version of the Markham Public Library By-laws effective November 2018.**

Carried.

#### 7.2 GP-2K: Enterprise Risk Management

Staff explained that GP-2K (Risk Management) was created as a Governance Policy to be used as an operational document. The document outlines the principles upon which the policy was developed, the objectives of the MPL ERM and the areas of responsibility.

The Board will review and approve *GP-2K. Risk Management*, receive reports on the implementation of the *ERM Program*, receive semiannual risk reports via the *Risk Register* in the CEO's report and review and approve MPL's *Risk Appetite Statement*.

The CEO will ensure that procedures, processes and resources are in place to effect this Policy, direct the preparation of the *Risk Register* for addressing organizational risks and prepare semi-annual reports to the Board highlighting significant risks and the risk treatment strategies to address them.

Moved by Mrs. Lillian Tolensky  
Seconded by Ms. Margaret McGrory

**Resolved that the Board receives and approves GP-2K: Enterprise Risk Management as a new Markham Public Library Governance Process effective December 17, 2018.**

Carried.

### 8.0 Ownership Linkage:

#### 8.1 Input from Board Members

Mr. Hendriks asked the Board if anyone had attended any recent events that they wished to comment on. There were none.

## **AGENDA 2.1**

### **8.2     Board Legacy Document**

The Chair advised that he had received some input from Board members and that he was working on coordinating them into one document.

The CEO explained that there was ground work laid for the expansion of the system within the I.L.M.P (Integrated Markham Leisure Plan) and that it is a lengthy process.

There were some questions, and the Chair asked the CEO if Staff could also provide their input for the Legacy Document.

### **9.0     Board Advocacy:**

#### **9.1     Events for the Next Quarter**

Staff explained that the document contained programs and events for winter 2019. They explained that some of these programs are staff-led and others facilitated by partners.

There are stars on the events calendar that indicate which would be beneficial for Board members to attend as they tend to attract a lot of citizens.

- Repair Cafe
- Family Literacy Day-Open Fair
- Seneca College Lecture Series
- York Scholars Hub Lecture Series
- PechaKucha Markham Volume 22

It was noted that the Repair café is also aimed at sparing landfill and has received a lot of positive feedback.

Moved by       Mrs. Pearl Mantell  
Seconded by    Ms. Aida DaSilva

**Resolved that the report “Events for the Next Quarter” be received.**

Carried.

### **10.0    Education**

#### **11.0    Incidental Information:**

#### **11.1    2019 Board Meeting and Agenda Planning Dates**

There was some commentary on holding meetings at different locations. Since 2015, the Board has held meetings in all Markham branches.

Moved by       Mrs. Lillian Tolensky  
Seconded by    Mr. Alfred Kam

## AGENDA 2.1

**Resolved that the 2019 Board meeting and agenda planning dates be received.**

Carried,

12.0 **New Business**

13.0 **Board Evaluation (none)**

14.0 **In Camera Agenda**

Moved by Mrs. Pearl Mantell

Seconded by Mrs. Yemisi Dina

**Resolved that the Board meet in Camera at 7:43 p.m. to discuss a confidential personnel matter.**

Carried.

The Board returned to its regular meeting at 8:26 p.m.

Moved by Mrs. Yemisi Dina

Seconded by Mrs. Marilyn Aspevig

**Resolved that the motions approved In Camera be ratified.**

Carried.

15.0 **Adjournment**

Moved by Mrs. Yemisi Dina and seconded by Mrs. Pearl Mantell that the meeting be adjourned at 8:28 p.m.



Report to: General Committee

Meeting Date: March 4, 2019

**SUBJECT:** 2018 Summary of Remuneration & Expenses for Councillors and Appointees to Boards

**PREPARED BY:** Sandra Skelcher, Manager, Financial Reporting and Payroll  
ext. 3880

### **RECOMMENDATION:**

- 1) That the report titled “2018 Summary of Remuneration & Expenses for Councillors and Appointees to Boards” be received; and,
- 2) THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

### **PURPOSE:**

As required by the Municipal Act, this report sets out the remuneration and expenses paid to Councillors and appointees to local boards and other bodies.

### **BACKGROUND:**

The Municipal Act under section 284 (1) states that the treasurer of a municipality shall in each year on or before March 31 provide to the council of the municipality an itemized statement on remuneration and expenses paid in the previous year to,

- (a) each member of council in respect of his or her services as a member of the council or any other body, including a local board, to which the member has been appointed by council or on which the member holds office by virtue of being a member of council;
- (b) each member of council in respect of his or her services as an officer or employee of the municipality or other body described in clause (a); and
- (c) each person, other than a member of council, appointed by the municipality to serve as a member of any body, including a local board, in respect of his or her services as a member of the body.

Furthermore, section 284 (2) requires that the statement shall identify the by-law under which the remuneration or expenses were authorized to be paid.

These expenses have been made in accordance with By-law 77-93 as amended by By-law 2002-273.

Appendix A includes the local portion of remuneration, the regional portion of remuneration (where applicable), discretionary expenses and Council directed expenses.

Appendix B includes remuneration and expenses for appointees to local boards.

**FINANCIAL CONSIDERATIONS AND TEMPLATE:**

Not applicable

**HUMAN RESOURCES CONSIDERATIONS**

Not applicable

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

Not applicable

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Not applicable

**RECOMMENDED BY:**

Joel Lustig  
Treasurer

Trinela Cane  
Commissioner, Corporate Services

**ATTACHMENTS:**

Appendix A – 2018 Summary of Remuneration and Expenses for Mayor and Council

Appendix B – 2018 Summary of Remuneration and Expenses for Appointees to Local Boards



**CITY OF MARKHAM  
SUMMARY OF REMUNERATION AND EXPENSES FOR MAYOR AND COUNCIL  
FOR THE YEAR ENDED DECEMBER 31, 2018**

	Mayor Frank Scarpitti	Regional Councillors					Ward Councillors											
		Don Hamilton	Jack Heath	Jim Jones	Joe Li	Nirmala Armstrong	Valerie Burke	Keith Irish	Alan Ho	Reid McAlpine	Karen Rea	Colin Campbell	Andrew Keyes	Amanda Collucci	Logan Kanapathi	Khalid Usman	Alex Chiu	Isa Lee
<b>Councillors Remuneration*</b>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Local Region</b>	189,482 56,917	79,150 3,738	99,781 56,917	86,326 56,917	86,651 56,917	80,747 53,179	81,072 -	4,555 -	85,584 -	4,555 -	87,234 -	83,572 -	4,555 -	86,834 -	44,000 -	41,885 -	80,747 -	4,555 -
<b>Total Remuneration</b>	<b>246,399</b>	<b>82,888</b>	<b>156,698</b>	<b>143,243</b>	<b>143,568</b>	<b>133,926</b>	<b>81,072</b>	<b>4,555</b>	<b>85,584</b>	<b>4,555</b>	<b>87,234</b>	<b>83,572</b>	<b>4,555</b>	<b>86,834</b>	<b>44,000</b>	<b>41,885</b>	<b>80,747</b>	<b>4,555</b>
<b>Discretionary Expenses</b>																		
Mileage, Gasoline and Maintenance	2,396	14	1,540	-	-	221	277	-	-	-	-	929	30	1,301	-	-	1,619	-
Meetings	215	347	385	-	-	-	1,175	-	-	-	1,612	283	-	2,216	676	4	146	-
Training, Seminars and Conferences	-	-	-	-	-	-	-	-	94	-	-	-	-	-	-	-	-	-
Vehicle Capitalization	12,255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
407 ETR	1,223	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Membership Fees and Subscriptions	-	20	55	-	-	-	-	-	-	-	-	-	-	-	-	-	84	-
Promotion and Advertising	3,745	5,505	2,649	8,000	407	6,074	1,827	-	7,598	344	4,077	4,334	327	4,483	3,688	1,148	3,729	202
Printing and Office Supplies	-	29	60	-	-	-	-	667	-	-	632	-	-	-	-	-	-	-
<b>Total Discretionary Expenses</b>	<b>19,834</b>	<b>5,915</b>	<b>4,689</b>	<b>8,000</b>	<b>407</b>	<b>6,295</b>	<b>3,279</b>	<b>667</b>	<b>7,692</b>	<b>344</b>	<b>6,320</b>	<b>5,545</b>	<b>357</b>	<b>8,000</b>	<b>4,364</b>	<b>1,152</b>	<b>5,578</b>	<b>202</b>
<b>Regional Councillor – Newsletter</b>	<b>346</b>	<b>-</b>	<b>-</b>	<b>3,000</b>	<b>-</b>	<b>2,057</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Regional Councillor Newsletter</b>	<b>346</b>	<b>-</b>	<b>-</b>	<b>3,000</b>	<b>-</b>	<b>2,057</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Council Directed Expenses (Non - Discretionary)</b>																		
Training, Seminars and Conferences	-	-	4,824	-	-	-	3,095	-	3,419	-	2,945	1,892	-	845	-	-	2,536	-
Business Mission	3,548	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Council Directed Expenses</b>	<b>3,548</b>	<b>-</b>	<b>4,824</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,095</b>	<b>-</b>	<b>3,419</b>	<b>-</b>	<b>2,945</b>	<b>1,892</b>	<b>-</b>	<b>845</b>	<b>-</b>	<b>-</b>	<b>2,536</b>	<b>-</b>

\* Does not include applicable benefits

**CITY OF MARKHAM**  
**SUMMARY OF REMUNERATION AND EXPENSES FOR APPOINTEES TO LOCAL BOARDS**  
**FOR THE YEAR ENDED DECEMBER 31, 2018**

**Appendix B**

<b><u>City of Markham Public Library Board</u></b>	<b><u>Mileage</u></b>
Ben Hendriks (Chair)	\$ 300
Regional Councillor Jack Heath	200
Councillor Isa Lee	200
Aida Dasilva	200
Alfred Kam	200
Alick Siu	200
Jennifer Yip	200
Lillian Tolensky	200
Margaret McGrory	200
Marilyn Aspevig	200
Pearl Mantell	200
Yemisi Dina	200
<b>Total</b>	<b><u>\$ 2,500</u></b>

<b><u>Committee of Adjustment *</u></b>	<b><u>Honorarium*</u></b>
Philip Gunn (Chair)	\$ 3,000
Arun Prasad	2,500
Gary Muller	2,500
Gregory Knight	2,500
Jeamie Crispi Reingold	2,500
Mike Visconti **	1,458
Thomas Gutfreund	2,500
<b>Total</b>	<b><u>\$ 16,958</u></b>

\*Committee period from December 1, 2017 to November 30, 2018

\*\* Mike Visconti stepped down effective June 2018



Report to: General Committee

Date Report: March 4, 2019

---

**SUBJECT:** Operations and Maintenance Agreements for Municipal Highways  
**PREPARED BY:** Alice Lam, Manager, Roads Operations, Ext. 2748  
**REVIEWED BY:** Morgan Jones, Director, Operations, Ext. 4857

---

#### **RECOMMENDATION:**

- 1) That the staff report entitled, Operations and Maintenance Agreement for municipal highways, be received; and,
- 2) That the Director of Operations be authorized to execute agreements between the City and other government entities and agencies relating to the operation and maintenance of municipal highways in the City of Markham, provided that the form and content of such agreements are satisfactory to the Commissioner of the Community and Fire Services and the City Solicitor; and,
- 3) That staff be authorized and directed to do all things necessary to give effect to this resolution.

#### **PURPOSE:**

The purpose of this report is to seek Council authorization for the City to enter into agreements with other government entities and agencies (such as York Region, York Region Transit, Toronto Transit Commission, the Town of Richmond Hill, etc.) to govern the operation and maintenance of municipal highways in the City of Markham.

#### **BACKGROUND:**

Municipal highways consist of the travelled road, the boulevard and the sidewalk used by motorists, pedestrians and cyclists. Jurisdiction of municipal highways within the City of Markham are divided between the Region and the City. The City's Operations staff provide year-round maintenance of the municipal highways within the jurisdiction of the City as well as sidewalks within the Region's municipal highways. Such work includes winter maintenance of roads, road rehabilitation, debris removal, repair, maintenance and replacement of streetlights and landscaping.

In some instances, the City enters into agreements with other levels of government to alter the standard division of responsibility for the maintenance of municipal highways or making more detailed arrangements for maintenance. This is sometimes the case where:

- it would be more efficient and/or beneficial for residents if one level of government assumes the maintenance of a portion of municipal highway that is not within its jurisdiction; or
- more than one government entity or agency has an interest in the maintenance of the municipal highway and improvements installed within the highway.

---

The following are some examples:

- **Royal Orchard Bus Loop:** The Region has jurisdiction over a small section of the Royal Orchard Boulevard loop from Bayview Avenue. This small section is connected to the City's portion of Royal Orchard Boulevard providing a connection to the Region's transportation network. The City currently maintains the Region's section of the Royal Orchard Boulevard loop to provide residents with the same level of service over the entire roadway. This loop also provides a safe turn around for the City's crews during winter maintenance.
- **Norman Bethune Avenue:** A portion of the 404 overpass referred to as Norman Bethune Avenue lies partly within Richmond Hill and partly within Markham. The City and Richmond Hill have entered into an agreement whereby the parties will maintain the entire overpass on an alternating annual basis.
- **Highway 7 Streetscape:** Highway 7 is a Regional road maintained by the Region (except for sidewalks which are maintained by the City). The Region agreed to install enhanced streetscaping within Highway 7 from Town Centre Boulevard to Sciberras Road on the condition that Markham would share in the maintenance of some of the improvements within the highways, such as the off-road bicycle path.
- **Yonge and Colborne Streetscaping:** Yonge Street is a Regional road maintained by the Region (except for sidewalks which are maintained by the City). The Region agreed to provide a portion of the funding to install enhanced streetscaping within the intersection of Yonge Street and Colborne Street on the condition that the City would share in the maintenance of some of the enhanced streetscaping (i.e. unit paver and enhance concrete planters) within that section of Yonge Street.

## **DISCUSSION:**

### **Operations and Maintenance Agreement**

Staff in consultation with other affected departments will negotiate and finalize agreements with other government entities and agencies (such as York Region, York Region Transit, Toronto Transit Commission, the Town of Richmond Hill, etc.) governing the operation and maintenance of municipal highways and infrastructure within the highways in Markham.

Currently, Staff are required to obtain Council approval before the City enters into any such maintenance agreements.

To reduce staff time and improve efficiency, staff recommend that the Director of Operations be delegated authority to execute future maintenance agreements with

Report to: General Committee

Date Report: March 4, 2019

Page 3

government agencies, provided that the form and content of such agreement are satisfactory to the Commissioner of the Community and Fire Services and the City Solicitor.

**Level of Service**

The maintenance standards set out in these agreements will be consistent with the City's Council approved levels of service and the Municipal Act, 2001, S.O. 2001, c.25, *O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways*.

**FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)**

Additional maintenance responsibilities assumed by the City in the proposed maintenance agreements authorized under this Council report would have no negative financial impact on the City's budget. Costs associated with additional maintenance responsibilities would be paid by either previously approved budgets and/or fee recovery. Staff would need to obtain Council authority for entering into maintenance agreements that would result negative financial impact on the City's budget.

**HUMAN RESOURCES CONSIDERATIONS:**

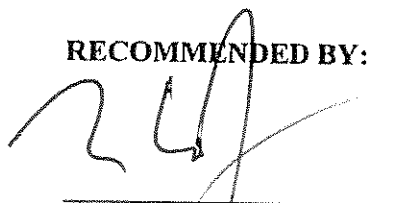
Not Applicable.

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

The recommendations of this report align with the strategic focus for a Safe & Sustainable Community through the ongoing management of the City's transportation network and ensuring the reliability of City services.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Finance and Legal have reviewed this report and their comments have been incorporated.

**RECOMMENDED BY:**  
\_\_\_\_\_  
Morgan Jones  
Director, Operations  
\_\_\_\_\_  
Brenda Librecz  
Commissioner, Community & Fire Services



Report to: General Committee

Meeting Date: March 04, 2019

**SUBJECT:** Annual Water Quality Report (January – December 2018)  
**PREPARED BY:** Helena Frantzke, Ext 2449  
 Water Quality Coordinator, Environmental Services

### **RECOMMENDATION:**

1. That the report titled “Annual Water Quality Report (January-December 2018)” as required by Schedule 22 of Ontario Regulation 170/03, under the *Safe Drinking Water Act, 2002*, enclosed herein be received;
2. That the Annual 2018 Regulatory Water Quality Report (Attachment “A”), containing information for the Ministry of the Environment, Conservation and Parks (MECP) on water supply and quality as required by Section 11 of Ontario Regulation 170/03, under the *Safe Drinking Water Act, 2002*, be received;
3. That Council acknowledge that staff posted the Annual 2018 Detailed Regulatory Water Quality Report on the City’s website and that it has been made available electronically and in hard copy version by February 28, 2019 as per regulations;
4. And That Staff be authorized and directed to do all things necessary to give effect to this resolution.

### **EXECUTIVE SUMMARY:**

As per Provincial Regulation 170/03, under the *Safe Drinking Water Act, 2002*, the City of Markham is mandated to produce the following two reports:

- 1) An annual report summarizing water quality information. This report outlines how the City of Markham receives its water, a description of the drinking water system and the water quality results for the period from January 1, 2018 to December 31, 2018. In addition, this report is required to be made available to the public upon request. The annual report has been posted on the Markham website and is available at the Waterworks Department located at 8100 Warden Avenue. The regulatory requirements for such a report are met in this way and a copy of the report has been enclosed as Attachment “A”, for Council reference.
- 2) A report prepared for Council is to be submitted by March 31, 2019. This report is to inform Council on any regulatory requirements that have not been met during the period of January 1, 2018 to December 31, 2018. For each requirement not met, Council is to be informed of what corrective actions were taken. In addition, a summary is to be provided of the quantities and flow rates of the water supplied during the same period. This report enclosed herein ensures that Markham has met all regulatory requirements.

Markham's customers consumed 29,828,844 m<sup>3</sup> of water over 365 days in 2018. Representative water quality sampling was undertaken throughout the distribution system and analyzed according to O. Reg. 170/03. Of the 7,165 regulatory samples taken in 2018, ten samples (0.14%) were reported as Adverse Water Quality Incidents (AWQIs). Of the ten adverse incidents, six were for microbiological indicators (tested positive for Total Coliforms), two were for deficient chlorine residual and the remaining two were for on-site observations during watermain break repairs. For all of the adverse incidents, the City of Markham performed the regulatory notifications and corrective actions to rectify the situation.

**PURPOSE:**

To inform Council, as owners of the drinking water system, on the quality of drinking water provided to the residents of Markham in 2018 through the water distribution system. By doing so, we are meeting the requirements of Schedule 22 of Ontario Regulation 170/03, under the *Safe Drinking Water Act, 2002*.

To provide Council with a summary on the more detailed & technical annual water quality report (included as Attachment "A"). This annual report has been prepared and made available to the public prior to February 28, 2019 via Markham's website and at the Waterworks Department located at 8100 Warden Avenue. This annual report details the drinking water system, sampling activity, corrective actions and any major monetary expenses incurred in 2018.

**BACKGROUND:**

In order to meet regulatory requirements and to strengthen customer confidence in the quality of the City of Markham's drinking water supply, Waterworks prepares annual update reports on the status of drinking water quality.

- 1) Enclosed, as Attachment "A", is the 2018 Annual Water Quality Report, which is intended to be a standalone document. This detailed, technical and statistical report summarizes the 2018 water distribution system, for: results of lab tests and corrective actions taken, and any major expenses incurred. The Regulation also requires that this report be made available to the public, free of charge, and be posted on the City of Markham's website on or before February 28, 2019.
- 2) The 2018 Annual Water Quality Report to Council, contained herein, is intended to inform Council on the performance of the water distribution system over the past year and to provide specific information that meets the Ontario Regulation 170/03 requirements concerning Markham's Drinking Water Distribution System.

**2018 Drinking Water System Information**

The City of Markham's drinking water system is strictly a distribution system. We do not operate any treatment plants and therefore the rated capacity of our system, as requested by the MECP, is not applicable. The Region of York receives treated water from both the City of Toronto and the Region of Peel, stores and distributes it to various Municipalities, including Markham, through trunk watermains from York and Toronto. The City of Markham purchases its water entirely through the Region of York as the wholesaler, and distributes this water to its residents through metered connections.

---

**OPTIONS/ DISCUSSION:****Water Supplied During 2018**

The City of Markham customers (including residential, industrial, commercial and institutional) purchased a total of 29,828,844 m<sup>3</sup> of water over 365 days in 2018. This amounts to an average of 2,485,737 m<sup>3</sup>/ month or 81,723 m<sup>3</sup>/day.

**2018 Drinking Water Quality Sampling Results**

Ontario's Drinking Water Systems Regulation (O.Reg.170/03) requires all drinking water system owners to collect and test a minimum prescribed number of representative water quality samples for its distribution system. It further requires that drinking water system owners prepare an annual report (in MECP format) on the operation and the quality of drinking water within their jurisdictional boundaries. Markham Waterworks Department has complied with this requirement.

For the calendar year January 1, 2018 to December 31, 2018; an annual regulatory report was prepared (MECP format) in January 2019 on the Markham Water Distribution System and is enclosed as Attachment "A". This report was posted prior to Feb. 28, 2019 as required by the Regulation.

During the period from January 1, 2018 to December 31, 2018, the total number of water samples collected and tested by Waterworks Operators was 7,165. These samples were tested for the presence of bacteria (*Escheria coli*, Total Coliforms, and Heterotrophic Plate Count), for chemical analysis (Organic parameters, including Trihalomethanes (THM) and Haloacetic acids (HAA), and Inorganic parameters including Lead (Pb), Nitrate (NO<sup>3</sup>) & Nitrite (NO<sup>2</sup>) and all chlorine residuals as required.

In 2018 there were eight (8) reported adverse water quality incidents out of the 7,165 samples, which did not meet the Ontario's Drinking Water Systems Regulation (O. Reg. 170/03) and two (2) on-site observational adverse water quality incidents during watermain break repairs.

### **2018 TOTAL NUMBER OF WATER SAMPLES**

<b>PARAMETER</b>	<b># SAMPLES TAKEN (TOTAL7,165)</b>	<b>REPORTABLE TO MOECC</b>	<b>ADVERSE RESULT (AWQI)</b>
MICROBIOLOGY - Scheduled (Total Coliforms / E. coli)	1,845	Yes	6
MICROBIOLOGY - Scheduled (HPC)	615	Not applicable	Not applicable
MICROBIOLOGY -Unscheduled (Total Coliforms /E. coli for Watermain Breaks and Resamples)	73	Yes	0
CHLORINE	4,500	Yes	2
OTHERS (Organic, Inorganic, Lead, THM, HAA, NO2/N03))	132	Yes	0

#### **Summary of Adverse Water Quality Incidents (AWQI's)**

In this report, we are detailing the ten (10) adverse sampling incidents which are summarized below.

##### **1. Adverse Water Quality – Presence of Bacteria**

As part of our weekly regular sampling schedule the required number of samples are taken and tested for microbiological parameters. Of the 1,845 samples tested for microbiology during 2018 on the drinking water system as part of our regular sampling, six (6) samples detected the presence of total coliforms, reported under 4 different AWQI numbers. The detection of total coliform in drinking water has had a longstanding history of use as an indicator of drinking water safety. Total coliform bacteria are common in the environment (soil or vegetation) and are generally harmless. Upon being notified by the York-Durham Regional Environmental Lab (YDREL) that a given sample did not meet the water quality regulations for bacteria, Waterworks staff immediately notified the York Region Medical Officer of Health (MOH) and the MECF Spills Action Centre. Senior staff were informed of all incidents by email. Immediate and proactive corrective actions were followed as per Standard Operating Procedures for responding to an adverse water quality test result. In such incidents the location which failed is resampled along with one location upstream and one location downstream of the initial location some distance away.

---

2. Adverse Water Quality – Low Chlorine Residual

In 2018 there were two (2) adverse chlorine residual incidents. Both incidents occurred on July 24, 2018. For both locations a sample was taken during dead end flushing at a hydrant which resulted in an adverse water quality incident (AWQI) for a low chlorine residual dropping below the regulatory requirement of 0.25 mg/L. Waterworks staff immediately notified the MECP & MOH and corrective actions were taken as required to flush the watermain until acceptable chlorine levels were achieved, which occurred after 7 minutes of flushing.

3. Adverse Water Quality – On-Site Observation

In 2018 there were two (2) on-site observation incidents reported as adverse water quality incidences during two separate watermain break repairs. The watermain break was repaired, the system was then flushed until acceptable chlorine residuals were established and a water sample was taken and tested for microbial contamination following the repair of the break. During one incident the notification sent by Waterworks staff to both the MECP and MOH was delayed, however all corrective actions were taken.

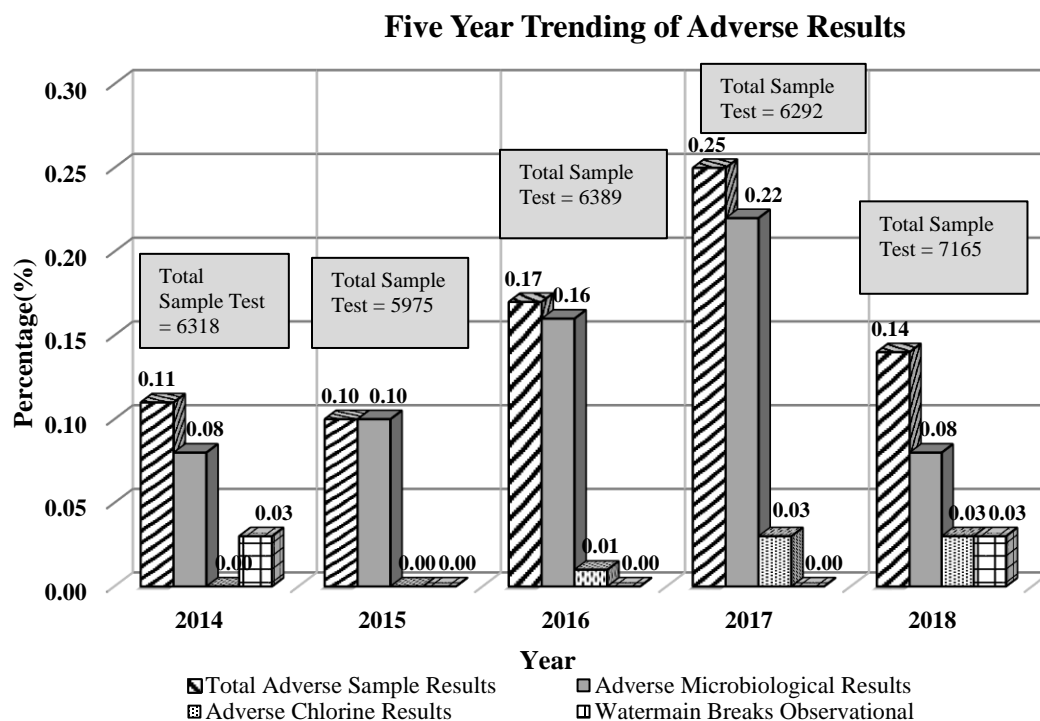
Watermain breaks are only to be reported to MECP when it has been observed that contaminated water may have been directed to users. These observations often occur when there is a severe watermain break resulting in the collapse of the pipe wall and entry of dirt in the watermain. Further, following every watermain repair, regardless of its severity, Waterworks initiates a procedure to test a water sample for microbial contamination.

Lead Sampling

The city of Markham has been granted relief from regulatory requirements outlined in Ontario Regulation 170/03 with respect to lead sampling. This includes no lead testing from plumbing servicing of private residences or non-residential buildings and reduced lead testing from distribution locations (20 per year). This reduced sampling has been granted for 2018 and 2019, at which time the MECP will review our program.

**5 Year Trending of Water Sampling:**

The graph below depicts the adverse sample results of the last 5 years (total sample test numbers, % adverse and source of the adverse incident).

**Conclusions:**

In 2018, the drinking water distributed to the City of Markham residents continued to be of high quality. During the operation of the water distribution system during 2018, there were few adverse water quality incidents (0.14% of all system tests undertaken) and corrective actions were taken immediately to resolve each incident. The drinking water system is maintained by Waterworks with continual improvements and programs in place to ensure excellent water quality.

**FINANCIAL CONSIDERATIONS**

Not Applicable

**HUMAN RESOURCES CONSIDERATIONS**

Not Applicable

---

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

The Annual Water Quality Report (January – December 2018) on the drinking water system meets legislative requirements and is consistent with the City's corporate goals of Infrastructure Management and Quality Community.

These goals enhance several key Waterworks service delivery components:

- Proactive and preventative strategies to identify and manage risks to public health;
- Continuous Improvement of Waterworks activities and service delivery;

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Not Applicable

The undersigned represent the Top Management of City of Markham's Drinking Water Distribution System, and by signing below the Top Management of the Operating Authority has reviewed the deficiencies, decisions and action items identified in the Management Review, and hereby communicating these results to the Owner.

**RECOMMENDED BY:**

Phoebe Fu, P. Eng.  
Director, Environmental Services

Brenda Librecz  
Commissioner, Community and Fire Services

Andy Taylor  
CAO, City of Markham

**ATTACHMENTS:**

Attachment "A" – Annual Water Quality Report (January – December 2018)

The contents of this report include:

1. A description of where the report will be located and made available to the public.
2. A brief description of the drinking water system.
3. A breakdown of major expenses incurred to install, repair or replace required equipment.
4. A summary of adverse water quality reports and corrective actions taken.
5. A summary of water quality testing results for microbiological, inorganic chemical, and organic chemical parameters.

The City of Markham has met the Regulation 170/03 submission dates and requirements of reporting for the annual water quality report.



**The Corporation of the City of Markham  
Annual Water Quality Report**

Covering the period from  
January 1, 2018 to December 31, 2018

**In compliance with  
The Ministry of the Environment, Conservation and Parks (MECP)  
Ontario Drinking Water Systems Regulation 170/03**

Dated: March 25, 2019



## CITY OF MARKHAM - WATER SAMPLING PROGRAM

*January 1 to December 31, 2018*

To comply with the Ontario Drinking Water System Regulation, Markham collects and tests water samples throughout its distribution system at a total of 106 locations. The 106 sample locations are strategically selected and evenly distributed to ensure Markham gets the best representation of the water distribution system. The need for additional locations is reviewed annually & in 2018, no additional locations were warranted. Sampling is rotated through the 106 locations and the drinking water is tested for Chlorine residual, Bacteria, Trihalomethanes (THM), Nitrites & Nitrates, Lead, Organics & Inorganics in compliance with Ontario Regulation 170/03. The samples are collected by licensed Waterworks operators and analyzed by an accredited and provincially licensed Laboratory.

Waterworks follows rigorous testing and compliance procedures. The City reports any adverse sampling results that occur to the York Region Medical Officer of Health and to the Ministry of Environment, Conservation and Parks (MECP) and immediately undertakes the necessary corrective action. Re-samples are taken following the corrective action(s) and tested until two consecutive samples are within acceptable parameters.

### **Summary of the sampling for 2018 follows:**

---

#### **Sampling Program:**

Total Number of Samples collected and tested in 2018= 7,165

#### **Adverse Test Results:**

Total Number of Adverse Water Quality Incidents (AWQI) = 10

#### **Breakdown of Adverse Results:**

Total adverse due to Microbiology Exceedances = 6

Total adverse due to low Chlorine Residual = 2

Total adverse due to Observation during Watermain Break = 2

---

The drinking water distributed to the City of Markham residents in 2018 was safe to drink and met all drinking water requirements. During the operation of the water distribution system during 2018, there were very few adverse sample incidents (0.14% of all system tests undertaken) and when these occurred, they were immediately resolved. The drinking water system is maintained by Waterworks with continual improvements and programs in place to ensure water of the highest quality.



## ANNUAL REPORT

**Drinking-Water System Number:**  
**Drinking-Water System Name:**  
**Drinking-Water System Owner:**  
**Drinking-Water System Category:**  
**Period being reported:**

**220004162**  
 Markham Distribution System  
 The Corporation of the City of Markham  
 Large Municipal Residential System  
 January 1, 2018 to December 31, 2018

**Complete if your Category is Large Municipal Residential or Small Municipal Residential**

**Does your Drinking-Water System serve more than 10,000 people? Yes [ x ] No [ ]**

**Is your annual report available to the public at no charge on a web site on the Internet? Yes [ x ] No [ ]**

**Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.**

- [www.markham.ca](http://www.markham.ca)
- 8100 Warden Ave. – Waterworks Department

**Complete for all other Categories.**

**Number of Designated Facilities served:**

Not applicable

**Did you provide a copy of your annual report to all Designated Facilities you serve?**

Yes [ ] No [ ]

**Number of Interested Authorities you report to:**

Not applicable

**Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?**

Yes [ ] No [ ]

**Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report**

**List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:**

Drinking Water System Name	Drinking Water System Number
Not applicable	

**Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?**

Yes [ ] No [ ]



Indicate how you notified system users that your annual report is available, and is free of charge.

- ☒ Public access/notice via the web  
☒ Public access/notice via Government Office  
☒ Public access/notice via a newspaper  
☒ Public access/notice via Public Request  
☐ Public access/notice via a Public Library  
☐ Public access/notice via other method \_\_\_\_\_

**Describe your Drinking-Water System**

The City of Markham's distribution system is an extension of the Toronto and York Region distribution systems. Raw surface water from Lake Ontario is disinfected, treated and tested rigorously by the City of Toronto and Peel Region for microbiological, organic and inorganic parameters prior to reaching the York Region distribution system. Markham is supplied with treated water via feeder mains from Toronto and Peel Region. York Region distribution system acts as a wholesale supplier of water and provides further testing, storage and pressure boosting for the Markham system.

Markham's Distribution System provides treated water to approximately 356,720 residents and is comprised of approximately 1,016 kilometers of various size watermain, 11,104 watermain valves and 8,713 municipal fire hydrants. Markham is a distribution only system, without pumping and storage facilities. Markham's drinking water within the distribution system is tested for standard parameters, in compliance with Ontario Regulation 170/03. The samples are collected by licensed Waterworks operators and analyzed by an accredited and provincially licensed Laboratory.

**List all water treatment chemicals used over this reporting period**

Not applicable; treatment chemicals are introduced at various sources by the City of Toronto, Peel Region and York Region only.

**Were any significant expenses incurred to?**

- ☒ Install required equipment  
☒ Repair required equipment  
☒ Replace required equipment

**Please provide a brief description and a breakdown of monetary expenses incurred**

<b>Cathodic Protection of Iron Watermains</b>	<b>= \$451,801</b>
<b>Watermain CIPP Lining (Watermain Rehabilitation)</b>	<b>= \$4,178,074</b>
<b>Water Meter Replacement/Upgrades</b>	<b>= \$676,446</b>
<b>Watermain Replacement</b>	<b>= \$435,685</b>
<b>Watermain Replacement Design for 2018</b>	<b>= \$305,883</b>



**Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
July 17, 2018 (AWQI #140706)	Total Coliform	P	P/A	Flush Mains and Resample	July 17, 2018
July 17, 2018 (AWQI #140720)	Total Coliform	P	P/A	Flush Mains and Resample	July 17, 2018
July 20, 2018 (AWQI #140869)	On-Site Observational Adverse	n/a	n/a	Repair Watermain Break, Flush Mains and Sample	July 20, 2018
July 24, 2018 (AWQI #140961)	Combined Chlorine Residual	0.10	mg/L	Flush Mains and Resample	July 24, 2018
July 24, 2018 (AWQI #140982)	Combined Chlorine Residual	0.05	mg/L	Flush Mains and Resample	July 24, 2018
July 24, 2018 (AWQI # 140983 Location 1)	Total Coliform	P	P/A	Flush Mains and Resample	July 24, 2018
July 24, 2018 (AWQI # 140983 Location 2)	Total Coliform	P	P/A	Flush Mains and Resample	July 24, 2018
July 24, 2018 (AWQI # 140983 Location 3)	Total Coliform	P	P/A	Flush Mains and Resample	July 24, 2018
July 24, 2018 (AWQI #140987)	Total Coliform	P	P/A	Flush Mains and Resample	July 24, 2018
Dec. 13, 2018 (AWQI #141316)	On-Site Observational Adverse	n/a	n/a	Repair Watermain Break, Flush Mains and Sample	Dec. 13, 2018

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.**

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	1,845	0-0	0-Presence Of Total Coliforms	615	0-470



**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results (min #)-(max #)
<b>Turbidity</b>		
<b>Chlorine</b>	8,760 (Chlorine Analyzer) 4,500 (Grab)	Combined: 0.05mg/L – 2.02 mg/L
<b>Fluoride</b> (If the DWS provides fluoridation)	*Next sampling is in January, 2020	

***NOTE:** For continuous monitors use 8760*

***NOTE:** Record the unit of measure if it is **not** milligrams per litre.*

**Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	May 02, 2018	0.0009	mg/L	No
Arsenic	May 02, 2018	0.0009	mg/L	No
Barium	May 02, 2018	0.0237	mg/L	No
Boron	May 02, 2018	0.0321	mg/L	No
Cadmium	May 02, 2018	<0.0005	mg/L	No
Chromium	May 02, 2018	<0.0005	mg/L	No
*Lead	See Summary Below			
Mercury	May 02, 2018	<0.05	ug/L	No
Selenium	May 02, 2018	<0.0005	mg/L	No
Sodium	N/A			
Uranium	May 02, 2018	<0.0005	mg/L	No
Fluoride	N/A			
Nitrite	November 27, 2018	<0.05	mg/L	No
Nitrate	November 27, 2018	<0.50	mg/L	No



## **\*Summary of Lead testing under Schedule 15.1 during this reporting period**

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	0	n/a	n/a
Distribution	20	<0.0005 mg/L – 0.0014 mg/L	0

The City of Markham was granted relief from regulatory requirements contained in Schedule 15.1 of O. Reg. 170/03. This includes no lead testing from plumbing servicing of private residences, no lead testing from plumbing servicing non-residential buildings and reduced lead testing from distribution locations (10 per period). This reduced sampling was granted for the two periods of sampling, December 15, 2017 to April 15, 2018 and June 15, 2018 to October 15, 2018.

## **Summary of Organic parameters sampled during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	May 02, 2018	<0.4	ug/L	No
Atrazine + N-dealkylated metabolites	May 02, 2018	<0.2	ug/L	No
Azinphos-methyl	May 02, 2018	<0.3	ug/L	No
Benzene	May 02, 2018	<0.1	ug/L	No
Benzo(a)pyrene	May 02, 2018	<0.01	ug/L	No
Bromoxynil	May 02, 2018	<0.4	ug/L	No
Carbaryl	May 02, 2018	<3.0	ug/L	No
Carbofuran	May 02, 2018	<3.0	ug/L	No
Carbon Tetrachloride	May 02, 2018	<0.2	ug/L	No
Chlorpyrifos	May 02, 2018	<0.2	ug/L	No
Diazinon	May 02, 2018	<0.2	ug/L	No
Dicamba	May 02, 2018	<0.4	ug/L	No
1,2-Dichlorobenzene	May 02, 2018	<0.1	ug/L	No
1,4-Dichlorobenzene	May 02, 2018	<0.1	ug/L	No
1,2-Dichloroethane	May 02, 2018	<0.1	ug/L	No
1,1-Dichloroethylene (vinylidene chloride or 1,1-dichloroethene)	May 02, 2018	<0.3	ug/L	No
Dichloromethane	May 02, 2018	<1.0	ug/L	No
2-4 Dichlorophenol	May 02, 2018	<0.7	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	May 02, 2018	<0.8	ug/L	No
Diclofop-methyl	May 02, 2018	<0.4	ug/L	No
Dimethoate	May 02, 2018	<0.3	ug/L	No
Diquat	May 02, 2018	<1.0	ug/L	No
Diuron	May 02, 2018	<3.0	ug/L	No
Glyphosate	May 02, 2018	<25	ug/L	No
Malathion	May 02, 2018	<0.2	ug/L	No
Metolachlor	May 02, 2018	<0.2	ug/L	No
Metribuzin	May 02, 2018	<0.3	ug/L	No
Monochlorobenzene	May 02, 2018	<0.1	ug/L	No



Paraquat	May 02, 2018	<1.0	ug/L	No
Pentachlorophenol	May 02, 2018	<0.4	ug/L	No
Phorate	May 02, 2018	<0.2	ug/L	No
Picloram	May 02, 2018	<0.7	ug/L	No
Polychlorinated Biphenyls(PCB)	May 02, 2018	<0.02	ug/L	No
Prometryne	May 02, 2018	<0.2	ug/L	No
Simazine	May 02, 2018	<0.2	ug/L	No
THM (NOTE: show latest annual average)	Annual Average	10.85	ug/L	No
Terbufos	May 02, 2018	<0.2	ug/L	No
Tetrachloroethylene(perchloroethylene)	May 02, 2018	<0.3	ug/L	No
2,3,4,6-Tetrachlorophenol	May 02, 2018	<0.5	ug/L	No
Triallate	May 02, 2018	<4.0	ug/L	No
Trichloroethylene	May 02, 2018	<0.1	ug/L	No
2,4,6-Trichlorophenol	May 02, 2018	<0.5	ug/L	No
Trifluralin	May 02, 2018	<0.006	ug/L	No
Vinyl Chloride	May 02, 2018	<0.2	ug/L	No
MCPA	May 02, 2018	<5.0	ug/L	No

**List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.**

Parameter	Result Value	Unit of Measure	Date of Sample
NONE			



Report to: General Committee

Meeting Date: March 04, 2019

**SUBJECT:** The Ontario Ministry of Environment, Conservation and Parks – Markham Distribution System – Inspection Report, January 09, 2019

**PREPARED BY:** Helena Frantzke, Ext. 2449  
Water Quality Coordinator, Environmental Services

**RECOMMENDATION:**

1. That the report entitled “The Ontario Ministry of Environment, Conservation and Parks – Markham Distribution System –Inspection Report, January 09, 2019” be received;
2. And that Staff be authorized and directed to do all things necessary to give effect to this resolution.

**EXECUTIVE SUMMARY:**

Not Applicable

**PURPOSE:**

The purpose of this report is to provide Council with an update on the findings of the Ministry of Environment, Conservation and Parks (MECP)’s Inspection of Markham’s Water Distribution System undertaken on January 09, 2019. This MECP inspection covered regulatory compliance since our last inspection conducted on December 14, 2017.

**BACKGROUND:**

The objective of the MECP Inspection is to provide a rigorous and comprehensive inspection program for municipal residential drinking water systems to determine if the systems are in compliance with the Safe Drinking Water Act, 2002 (SDWA) and associated Regulations. The Safe Drinking Water Act, 2002 (SDWA) states that a provincial officer may at any reasonable time conduct an inspection for the purpose of determining compliance with regulatory requirements contained within the Act, or any of the associated Regulations. Traditionally, the MECP has conducted an annual inspection of Markham’s Water Distribution System.

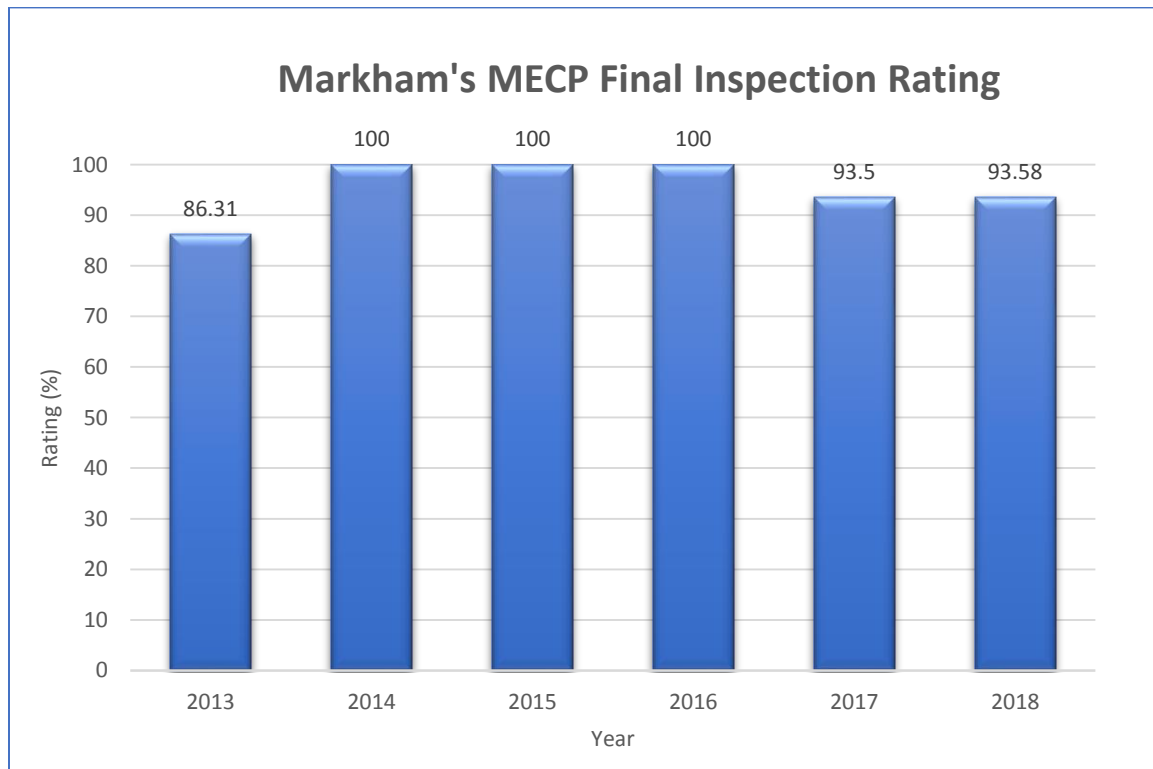
On January 09, 2019 the MECP conducted an announced on-site inspection of Markham’s Water Distribution System. The MECP Inspector reviewed Waterworks procedures, policies and records since their last inspection which was held on December 14, 2017.

The final MECP inspection report was received on January 22, 2019, (see attachment “A”).

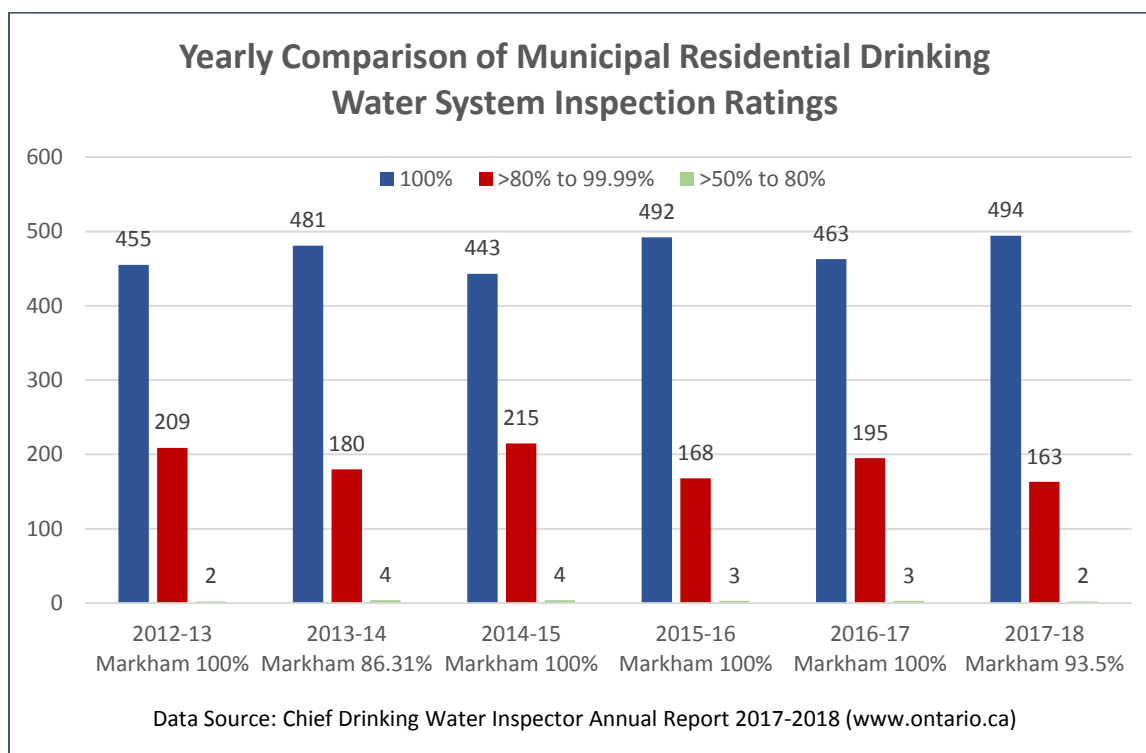
**OPTIONS/ DISCUSSION:**

During the inspection time period, between, December 01, 2017 to December 15, 2018, there was one incident of regulatory non-compliance identified. (An Adverse Water Quality Incident (AWQI) occurred as a result of an on-site observation during a watermain break that was not immediately reported to the MECP and York Region Public Health Department. The non-reporting omission was caught by staff two days later and then reported.) As a result, the City of Markham received a Final Inspection Rating of 93.58% for compliance with the MECP's Drinking Water Systems Regulation 170/03 during the period covered. This Inspection Rating is used to measure Municipal Residential Drinking Water System Inspection Results. The MECP's inspection program is an important aspect of the MECP's drinking water safety net and the primary goal is to encourage ongoing improvement of drinking water systems and to work toward the goal of 100% regulatory compliance.

Below is a summary of Markham's MECP Inspection Ratings over the past six years:



Below is a comparison of Markham's MECP Inspection Ratings to other municipalities over the last 6 years. The 2018-2019 Municipal Inspection Ratings will be published in October 2019 by the MECP that will capture our latest rating.



#### **Details of Non-Compliance Identified for the December 01, 2017 to December 15, 2018 Inspection Period**

On December 11, 2018, a Category 2 Watermain Break occurred. When an Operator observes that contaminated water may possibly have been directed to users, the watermain break is categorized as a Category 2 Observation Watermain Break and is required to be reported immediately to the MECP and MOH. The on-site Operator did not report the incident to their Supervisor immediately and as a result Waterworks staff did not provide immediate notification to the MECP and the MOH as required. Staff did take all the appropriate corrective actions and flushing steps at the time when placing the watermain back in service. On December 13, 2018, after reviewing documents and logbooks, Waterworks staff discovered that the incident was classified on-site as a Category 2 – Observation Watermain Break but was not reported. Staff then immediately notified the MECP and MOH of the incident.

Even though all corrective actions were followed properly and the watermain was repaired the same day; a non-compliance was issued by the MECP for not providing immediate notification as required under Ontario Regulation 170/03.

---

On December 19, 2018 an After Action Review was also conducted to determine the root cause of the incident and determine actions to prevent this non-compliance from reoccurring in the future. Minutes of the meeting were taken and the following actions have been put in place by Waterworks staff:

1. The Watermain Break email notification, which is sent out when the break was determined and again after all repairs have been completed, was revised to include a location for the Waterworks Supervisor to indicate whether the break was determined to be a Category 1 or Category 2 break. This will ensure the category of the break is captured and all required notifications are made at the time.
2. The Watermain Break work instructions were reviewed with all Waterworks Operators, with detailed focus on requirements for Category 1 and Category 2 break situations.

### **MECP BEST PRACTICE ISSUES AND RECOMMENDATIONS**

During the inspection, logbooks were reviewed and found to be in compliance with the requirements for record-keeping content prescribed under Ontario Regulation 128/04. The use of liquid paper was identified in some logbook entries by the MECP Inspector, which is not a permitted way of document alteration. The following Recommendations were provided by the MECP:

1. *The City of Markham shall develop/revise their “Logbook/Record Keeping Standard Operating Procedure (SOP)”. The SOP shall include a provision prohibiting the use of liquid paper and state the correct form to include corrections in every entry. The City of Markham shall submit a copy of the SOP to the MECP Officer no later than February 1, 2019.*
  - a. The City of Markham has a Work Instruction for Log Entries. The Work Instruction was reviewed and revised to include detailed instructions on the proper method of making log entries and corrections, without the use of liquid paper. A copy of the revised Work Instruction for Log Entries was forwarded to the MECP Officer on January 16, 2019.
2. *The Operators of the City of Markham shall be trained on the “Logbook/Record Keeping” SOP including the requirements for record-keeping prescribed under Ontario Regulation 128/04. The City of Markham shall submit a copy of training records, including operator’s signatures, to the MECP Officer to confirm that all operators have been trained no later than March 15, 2019.*
  - a. All Waterworks Operators have been trained on the requirements for record-keeping prescribed under Ontario Regulation 128/04, by reviewing the Work Instruction for Log Entries and a detailed review on the proper method of making entries and corrections, without the use of liquid paper.

### **FINANCIAL CONSIDERATIONS**

Not Applicable

### **HUMAN RESOURCES CONSIDERATIONS**

Not Applicable

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

Not Applicable

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Not Applicable

The report presented herein, communicates the results of the annual MECP Inspection conducted on January 09, 2019.

The undersigned represent the Top Management of the City of Markham's Drinking Water Distribution system and by signing below the Top management of the Operating Authority have reviewed the MECP Inspection Report.

**RECOMMENDED BY:**

Phoebe Fu  
Director, Environmental Services

Brenda Librecz  
Commissioner, Community & Fire Services

Andy Taylor  
Chief Administrative Officer

**ATTACHMENTS:**

Attachment "A" – Ontario Ministry of the Environment, Conservation and Parks, Markham Distribution System – Inspection Report, January 09, 2019.



Attachment 'A'

**The Ontario Ministry of the Environment, Conservation and Parks**  
**Inspection Report**  
**January 09, 2019**



**Ministry of the Environment, Conservation and Parks**

**MARKHAM DISTRIBUTION SYSTEM**

**Inspection Report**

<b>Site Number:</b>	220004162
<b>Inspection Number:</b>	1-I6J6L
<b>Date of Inspection:</b>	Jan 09, 2019
<b>Inspected By:</b>	Francisco Baldizon

Ministry of the Environment Drinking Water Inspection



## **TABLE OF CONTENTS**

1. Drinking Water System Owners Information
2. Drinking Water System Inspection Report

### **Appendix:**

- A. Stakeholders Appendix
- B. Inspection Rating Record
- C. Haloacetic Acids (HAAs)



## Ministry of the Environment, Conservation and Parks Inspection Report

### OWNER INFORMATION:

<b>Company Name:</b>	MARKHAM, THE CORPORATION OF THE CITY OF		
<b>Street Number:</b>	101	<b>Unit Identifier:</b>	
<b>Street Name:</b>	TOWN CENTRE Blvd N		
<b>City:</b>	MARKHAM		
<b>Province:</b>	ON	<b>Postal Code:</b>	L3R 9W3

### CONTACT INFORMATION

<b>Type:</b>	Main Contact	<b>Name:</b>	Helena Frantzke
<b>Phone:</b>	(905) 477-7000	<b>Fax:</b>	(905) 475-4732
<b>Email:</b>	hfrantzke@markham.ca		
<b>Title:</b>	Compliance Coordinator		

<b>Type:</b>	Contact	<b>Name:</b>	Peter Solymos
<b>Phone:</b>	(905) 477-7000	<b>Fax:</b>	(905) 475-4732
<b>Email:</b>	psolymos@markham.ca		
<b>Title:</b>	Supervisor		

<b>Type:</b>	Main Contact	<b>Name:</b>	Mario Puopolo
<b>Phone:</b>	(905) 477-7000	<b>Fax:</b>	(905) 475-4732
<b>Email:</b>	mpuopolo@markham.ca		
<b>Title:</b>	Compliance Coordinator		

### INSPECTION DETAILS:

<b>Site Name:</b>	MARKHAM DISTRIBUTION SYSTEM
<b>Site Address:</b>	101 TOWN CENTRE BLVD N MARKHAM L3R 9W3
<b>County/District:</b>	Markham
<b>MECP District/Area Office:</b>	York-Durham District
<b>Health Unit:</b>	YORK REGION HEALTH SERVICES DEPARTMENT
<b>Conservation Authority:</b>	
<b>MNR Office:</b>	
<b>Category:</b>	Large Municipal Residential
<b>Site Number:</b>	220004162
<b>Inspection Type:</b>	Announced
<b>Inspection Number:</b>	1-I6J6L
<b>Date of Inspection:</b>	Jan 09, 2019
<b>Date of Previous Inspection:</b>	Dec 14, 2017

### COMPONENTS DESCRIPTION

<b>Site (Name):</b>	MOE DWS Mapping	<b>Sub Type:</b>	
<b>Type:</b>	DWS Mapping Point		

**Site (Name):** Markham Operation Office

**Ministry of the Environment, Conservation and Parks  
Inspection Report****Type:** Other**Sub Type:** Other**Comments:**

The Markham Distribution System is owned and operated by the City of Markham, and receives treated water from the City of Toronto and the Region of Peel. The trunk transmission lines, pumping stations, and water storage facilities located within the City of Markham are owned and operated by the Region of York. The Region of York measures and monitors the distribution water flows and volumes directed to the City of Markham through the use of nineteen (19) flow meters located along the Richmond Hill, Vaughan, Stouffville, Toronto and Markham boundaries.

The Markham Distribution System provides potable water to approximately 350,000 residents of Markham and consists of approximately 1,070 km of watermains, 8,620 hydrants, 10,910 valves, and 82,277 service connections.



## INSPECTION SUMMARY:

### Introduction

- The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period.

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

This report is based on an inspection of a "stand alone connected distribution system". This type of system receives treated water from a separately owned "donor" system. This report contains the elements required to assess key compliance and conformance issues associated with a "receiver" system. This report does not contain items associated with the inspection of the donor system, such as source waters, intakes/wells and treatment facilities.

This report is based on a "focused" inspection of the system. Although the inspection involved fewer activities than those normally undertaken in a detailed inspection, it contained critical elements required to assess key compliance issues. This system was chosen for a focused inspection because the system's performance met the ministry's criteria, most importantly that there were no deficiencies as identified in O. Reg. 172/03 over the past 3 years. The undertaking of a focused inspection at this drinking water system does not ensure that a similar type of inspection will be conducted at any point in the future.

This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

On January 09, 2019, Water Inspectors, Francisco Baldizon and Dee Cox conducted an announced inspection of the Markham Distribution System.

Documents pertaining to the system were reviewed both onsite and offsite. Information and assistance with the inspection were provided by the City of Markham staff.

The inspection review period is from December 01, 2017 through to December 15, 2018.

The Markham Distribution System operates under Municipal Drinking Water License (MDWL) # 021-101, Issue # 7 and Drinking Water Works Permit (DWWP) # 021-201, Issue # 3.

### Treatment Processes

- The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.
- The owner/operating authority was in compliance with the requirement to prepare Form 1 documents as required by their Drinking Water Works Permit during the inspection period.  
Six (6) Forms 1 were required for the Drinking Water System during the review period. The information provided was reviewed and was in compliance with Schedule B Condition 3.0 of the DWWP.
- The owner/operating authority was in compliance with the requirement to prepare Form 2 documents as



### Treatment Processes

required by their Drinking Water Works Permit during the inspection period.

One (1) Form 2 was required for the System during the review period. The information provided was reviewed and was in compliance with Schedule B, Condition 4.0 of the DWWP.

### Treatment Process Monitoring

- The secondary disinfectant residual was measured as required for the distribution system.

The system collects at least seven samples per week in different locations to meet the requirements prescribed in Schedule 7-2 of O. Reg. 170/03. Total and free chlorine residuals are collected using handheld colorimeters during dead end hydrant flushing and during microbiological sampling. In addition to grab samples two continuous on-line analyzers collect chlorine residuals every 2.5 minutes to meet the requirements for on-line continuous monitoring prescribed in Schedule 6-5 of O. Reg. 170/03.

- Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.
- All continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.

Information provided by City of Markham staff and confirmed in the "Continuous Chlorine Analyzer – Monitoring" section of the DWS' Operations Manual acknowledge that when there is a continuous chlorine analyzer failure, at any of the analyzers, an alarm will be sent to the ORO to their cell phone. A failure of the chlorine analyzer may be due to loss in communication (equipment malfunction, power outage, and no flow sensors), low sample flow, or a combined chlorine residual reading of equal or less than 0.40 mg/L; equal or greater than 2.10 mg/L; equal or less than 0.25 mg/L or equal or greater than 3.00 mg/L.

- Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.  
Online chlorine analyzers are required to record total and free chlorine residual values at least every hour (60 minutes) with a minimum alarm standard of 0.25 mg/L. The two chlorine online analyzers currently operating at the DWS record values every 2.5 minutes with minimum alarms standards set at equal or less than 0.40 mg/L.
- All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.

### Distribution System

- Existing parts of the distribution system that are taken out of service for inspection, repair or other activities that may lead to contamination, and all new parts of the distribution system that come in contact with drinking water, were disinfected in accordance with Schedule B, Condition 2.3 of the Drinking Water Works Permit, or an equivalent procedure (i.e. the Watermain Disinfection Procedure).

### Operations Manuals

- The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.

Up to date drawings and maps are available digitally with hard copies maintained at the City of Markham's operations centre.



## Ministry of the Environment, Conservation and Parks Inspection Report

### Operations Manuals

- **The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.**

The Operations Manual was reviewed and it meets the requirements prescribed in Condition 16.0 of the Municipal Drinking Water License.

### Logbooks

- **Logbooks were properly maintained and contained the required information.**

Log books were reviewed at the time of the inspection and they were in compliance with the requirements for records-keeping prescribed in Section 27 of O. Reg. 128/04. The use of liquid paper was identified in some entries; this issue is addressed in the Summary of Recommendations and Best Practices Issues section of this report.

- **Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.**

Information identified in the log books confirmed that only certified operators are conducting operational checks in the system. Operator's licences were reviewed on Site and verified at the Ontario Water and Wastewater Certification Office (OWWCO) website.

### Security

- **The owner had provided security measures to protect components of the drinking water system.**

The majority of the DWS components are unexposed. Sample stations are locked and equipment for repairs is stored securely at the City of Markham's Public Works Yard within a fenced area equipped with an alarm system after hours to prevent access to unauthorized persons.

### Certification and Training

- **The overall responsible operator had been designated for each subsystem.**
- **Operators in charge had been designated for all subsystems which comprised the drinking-water system.**

### Water Quality Monitoring

- **All microbiological water quality monitoring requirements for distribution samples were being met.**

According to O. Reg. 170/03, the System is required to collect one hundred and thirty five (135) microbiological samples every month with at least one sample collected each week. All samples are to be analyzed for *Escherichia coli* and total coliforms, and 25% of the samples required must also be tested for heterotrophic plate count (HPC). Sampling records reviewed as part of this inspection confirmed that these requirements were achieved during the inspection review period.

- **All haloacetic acid water quality monitoring requirements prescribed by legislation are being conducted within the required frequency and at the required location.**

Haloacetic acids (HAA) monitoring is conducted at least once every calendar quarter from a point in the drinking water system that is likely to have an elevated potential for the formation of HAAs, as required by section 13-6.1 of Schedule 13 of O. Reg. 170/03.

Please refer to the Haloacetic Acids (HAAs) Sampling Concerns Letter submitted by the Ministry to Municipal



## Ministry of the Environment, Conservation and Parks Inspection Report

### Water Quality Monitoring

Drinking Water Systems in May 9, 2018 and attached to this report in Appendix C for further reference regarding sampling locations and procedures.

- All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.  
THM samples are being collected every quarter of a calendar year in the extremities of the system as required in O. Reg. 170/03.

- All water quality monitoring requirements imposed by the Municipal Drinking Water Licence and Drinking Water Works Permit were being met.

The Drinking Water System was granted regulatory relief for lead sampling under MDWL # 021-101, Section 1, Schedule D. In exchange of regulatory requirements under Schedule 15.1 of O. Reg. 171/03, the owner is required to collect and test for lead at ten (10) sampling points in the distribution system. This was in effect for the December 15, 2017 to April 15, 2018 and June 15, 2018 to October 15, 2018 sampling periods. Data was review during the inspection period and confirmed that the DWS complied with these requirements.

- Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

Chains of custody of the microbiological sampling were reviewed as part of the inspection and it was confirmed that chlorine residuals were taken each time that bacteriological samples were collected.

### Water Quality Assessment

- Records did not show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O.Reg. 169/03).  
Three (3) exceedances to Schedule 1 of O. Reg. 169/03 were identified during the current review period: Total Coliforms Present on June 27, 2017; July 17, 2018 and July 24, 2018 (3 sampling stations).

### Reporting & Corrective Actions

- Corrective actions (as per Schedule 17) had been taken to address adverse conditions, including any other steps that were directed by the Medical Officer of Health.  
Resamples for the adverse results were collected resulting in compliance with the standard. No further actions were required by the local Health Unit for those incidents.
- All required notifications of adverse water quality incidents were not immediately provided as per O. Reg. 170/03 16-6.

On December 11, 2018 a category 2 water main break occurred in a section of the DWS. The Operator attending the site did not report the incident to their Supervisor immediately and as a result the Spills Action Centre (SAC) and the Health Unit (HU) were not notified. On December 13, 2018 after reviewing documents and log books the Supervisor identified that the incident was classified as a category 2 - Observation Watermain Break. The Water Quality Coordinator immediately contacted the Area Inspector. The Area Inspector advised them to contact SAC and the HU and submit part 2A immediately.

Corrective actions were followed and the watermain was repaired the same day: December 11, 2018; however immediate verbal notification and written notice within 24 hours were not provided to the Spills Action Centre or the Health Unit as is required in Schedule 16-6 of O. Reg. 170/03.

- Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or



Ministry of the Environment, Conservation and Parks  
Inspection Report

---

**Reporting & Corrective Actions**

turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.

- All changes to the system registration information were provided within ten (10) days of the change.

**Other Inspection Findings**

- The following issues were also noted during the inspection:

During the physical inspection several entries in the water main break forms were corrected using liquid paper. In addition to this on May 16, 2018 one entry was identified to be corrected with liquid paper on the Supervisor's Standby Journal.



## NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

1. All required notifications of adverse water quality incidents were not immediately provided as per O. Reg. 170/03 16-6.

Verbal notification not provided within 24 hours after an Adverse Water Quality Incident occurred

**Action(s) Required:**

Ensure that verbal notifications of Adverse Water Quality Incidents are provided in timely fashion and to the authorities required in Schedule 16 of O. Reg. 170/03.



## SUMMARY OF RECOMMENDATIONS AND BEST PRACTICE ISSUES

This section provides a summary of all recommendations and best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following issues and consider measures to address them.

**1. The following issues were also noted during the inspection:**

Entries in log books corrected using liquid paper.

**Recommendation:**

COMPLIANCE DATES: FEBRUARY 15 & MARCH 15, 2019.

BY NO LATER THAN FEBRUARY 1, 2019.

The City of Markham shall develop/revise their "Logbook/Record Keeping "Standard Operating Procedure" (SOP). The SOP shall include a provision prohibiting the use of liquid paper and state the correct form to include corrections in every entry. The City of Markham shall submit a copy of the SOP to the undersigned Provincial Officer.

BY NO LATER THAN MARCH 15, 2019.

The operators of the City of Markham shall be trained on the "Logbook/Record Keeping" SOP including the requirements for record-keeping prescribed in Section 27 of O. Reg. 128/04. The City shall submit a copy of the training record, including operator's signatures, to the undersigned Provincial Officer to confirm that all operators have been trained.

Francisco Baldizon  
Water Inspector, Badge # 1691  
YDTHP District Office, Central Region  
Ministry of the Environment Conservation and Parks  
230 Westney Road South, 5th Floor  
(p) 905-427-5613  
(e) Francisco.Baldizon@ontario.ca




Ministry of the Environment, Conservation and Parks  
Inspection Report

---

**SIGNATURES**

Inspected By:

Francisco Baldizon

  
Signature: (Provincial Officer)

Reviewed & Approved By:

Tessa Villeneuve

Signature: (Supervisor)



Review & Approval Date:

Jan. 16 2019

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.

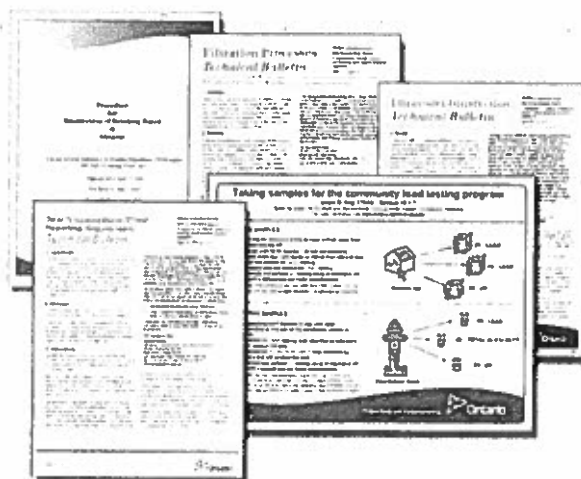


## **APPENDIX A STAKEHOLDER APPENDIX**

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles in the table below or use your web browser to search for their titles. Contact the Public Information Centre if you need assistance or have questions at 1-800-565-4923/416-325-4000 or [picemail.moe@ontario.ca](mailto:picemail.moe@ontario.ca).

For more information on Ontario's drinking water visit [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater) and email [drinking.water@ontario.ca](mailto:drinking.water@ontario.ca) to subscribe to drinking water news.

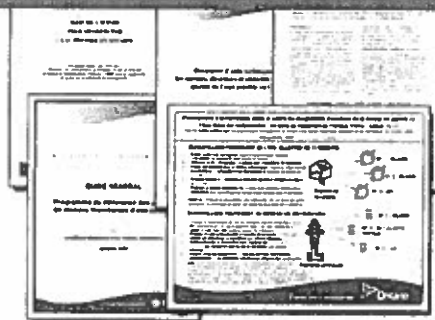


PUBLICATION TITLE	PUBLICATION NUMBER
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	7889e01
FORMS: Drinking Water System Profile Information, Laboratory Services Notification, Adverse Test Result Notification Form	7419e, 5387e, 4444e
Procedure for Disinfection of Drinking Water in Ontario	4448e01
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	7152e
Total Trihalomethane (TTHM) Reporting Requirements Technical Bulletin (February 2011)	8215e
Filtration Processes Technical Bulletin	7467
Ultraviolet Disinfection Technical Bulletin	7685
Guide for Applying for Drinking Water Works Permit Amendments, Licence Amendments, Licence Renewals and New System Applications	7014e01
Certification Guide for Operators and Water Quality Analysts	
Guide to Drinking Water Operator Training Requirements	9802e
Taking Samples for the Community Lead Testing Program	6560e01
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	7423e
Guide: Requesting Regulatory Relief from Lead Sampling Requirements	6610
Drinking Water System Contact List	7128e
Technical Support Document for Ontario Drinking Water Quality Standards	4449e01

[ontario.ca/drinkingwater](http://ontario.ca/drinkingwater)

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment.

Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau ci-dessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le Centre d'information au public au 1 800 565-4923 ou au 416 325-4000, ou encore à [picemail.moe@ontario.ca](mailto:picemail.moe@ontario.ca) si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site [www.ontario.ca/eaupotable](http://www.ontario.ca/eaupotable) ou envoyez un courriel à [drinking.water@ontario.ca](mailto:drinking.water@ontario.ca) pour suivre l'information sur l'eau potable.

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Prendre soin de votre eau potable – Un guide destiné aux membres des conseils municipaux	7889f01
Renseignements sur le profil du réseau d'eau potable, Avis de demande de services de laboratoire, Formulaire de communication de résultats d'analyse insatisfaisants et du règlement des problèmes	7419f, 5387f, 4444f
Marche à suivre pour désinfecter l'eau potable en Ontario	4448f01
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids (en anglais seulement)	7152e
Total Trihalomethane (TTHM) Reporting Requirements: Technical Bulletin (février 2011) (en anglais seulement)	8215e
Filtration Processes Technical Bulletin (en anglais seulement)	7467
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	7685
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable, de modification du permis de réseau municipal d'eau potable, de renouvellement du permis de réseau municipal d'eau potable et de permis pour un nouveau réseau	7014f01
Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable	
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802f
Prélèvement d'échantillons dans le cadre du programme d'analyse de la teneur en plomb de l'eau dans les collectivités	6560f01
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	7423f
Guide: Requesting Regulatory Relief from Lead Sampling Requirements (en anglais seulement)	6610
Liste des personnes-ressources du réseau d'eau potable	7128f
Document d'aide technique pour les normes, directives et objectifs associés à la qualité de l'eau potable en Ontario	4449f01

[ontario.ca/eaupotable](http://ontario.ca/eaupotable)



**APPENDIX B**  
**INSPECTION RATING RECORD**

## Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2018-2019)

**DWS Name:** MARKHAM DISTRIBUTION SYSTEM  
**DWS Number:** 220004162  
**DWS Owner:** Markham, The Corporation Of The City Of  
**Municipal Location:** Markham

**Regulation:** O.REG 170/03  
**Category:** Large Municipal Residential System  
**Type Of Inspection:** Adhoc  
**Inspection Date:** January 9, 2019  
**Ministry Office:** York-Durham District

Maximum Question Rating: 327

Inspection Module	Non-Compliance Rating
Treatment Processes	0 / 22
Distribution System	0 / 21
Operations Manuals	0 / 28
Logbooks	0 / 18
Certification and Training	0 / 14
Water Quality Monitoring	0 / 63
Reporting & Corrective Actions	21 / 70
Treatment Process Monitoring	0 / 91
<b>TOTAL</b>	<b>21 / 327</b>

Inspection Risk Rating 6.42%

**FINAL INSPECTION RATING: 93.58%**

## Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2018-2019)

**DWS Name:** MARKHAM DISTRIBUTION SYSTEM  
**DWS Number:** 220004162  
**DWS Owner:** Markham, The Corporation Of The City Of  
**Municipal Location:** Markham

**Regulation:** O.REG 170/03  
**Category:** Large Municipal Residential System  
**Type Of Inspection:** Adhoc  
**Inspection Date:** January 9, 2019  
**Ministry Office:** York-Durham District

Non-compliant Question(s)	Question Rating
<b>Reporting &amp; Corrective Actions</b>	
Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?	21
<b>TOTAL QUESTION RATING</b>	21

Maximum Question Rating: 327

Inspection Risk Rating 6.42%

FINAL INSPECTION RATING: 93.58%



## **APPENDIX C HALOACETIC ACIDS (HAAs)**

Ministry of the Environment,  
Conservation and Parks

Compliance, Promotion  
and Support Branch

2<sup>nd</sup> floor  
40 St. Clair Ave West  
Toronto ON M4V 1M2

ministère de l'Environnement, de  
la Protection de la nature et des  
Parcs

Direction de la promotion de la  
conformité  
et du soutien

2<sup>ème</sup> étage  
40, avenue St. Clair Ouest  
Toronto (Ontario) M4V 1M2



**August 1<sup>st</sup>, 2018**

## **RE: Haloacetic Acids (HAAs) Sampling Concerns**

Non-Municipal Year Round Residential Drinking Water System Owners/Operators,

The purpose of this document is to clarify ministry guidance for HAAs sampling. HAAs are disinfection by-products (DBPs) that are formed when dissolved organic matter reacts with chlorine which is added for the purpose of disinfection. Detailed information on HAAs can be found in "Health Canada (2008) Guidelines for Canadian Drinking Water Quality: Guideline Technical Document — Haloacetic Acids".

HAAs are a collection of several different compounds. The haloacetic acids most commonly found in drinking water are monochloroacetic acid (MCA), dichloroacetic acid (DCA), trichloroacetic acid (TCA), monobromoacetic acid (MBA) and dibromoacetic acid (DBA). Total HAAs is the sum of these five haloacetic acids. The HAAs most commonly found in the distribution system of drinking water systems are TCA and DCA. However the presence of bromide ions can result in the formation of MBA and DBA.

### **Sampling Points for HAAs**

The ministry has recognized that more than one sampling location may be needed to characterize the HAAs levels throughout a distribution system. HAA concentrations can vary within and between distribution systems and so monitoring samples should be taken at points in the "middle" of the distribution system (i.e. an average water age, post re-chlorination). In light of the recently introduced HAAs standard of 80 µg/L, which will come in to force on January 1, 2020, the following guidance should be used in developing your monitoring program:

1. As a general rule, all samples described below should be obtained from a sampling point where the free (combined) chlorine residual concentration is maintained over 0.2 mg/L (1.0 mg/L) respectively.
2. First year of sampling: A system's established THM sampling point may be appropriate provided the chlorine concentrations are as described in item 1. If the residual is below the concentrations listed, use a nearby sampling point that meets the recommended residual.
3. Second year of sampling: obtain the sample from another point in the distribution system.
4. Third year of sampling:
  - a. If neither of the running annual averages for HAAs calculated (after year one and two) were higher than one-half of the standard (40 µg/L), the sampling point used in the first year of sampling can be used for compliance in future years.
  - b. If one of the running annual averages is over 40 µg/L, a third sampling point should be chosen using the same criteria as the second year. Subsequent sampling should be conducted from the point which had the highest individual sample result.

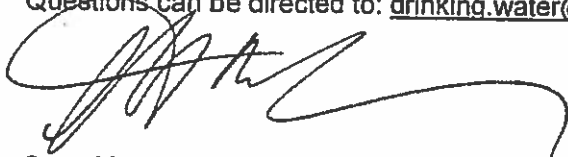
The outlined sampling plan is intended to be flexible and recognizes that sampling for HAAs has been required since 2017. The purpose of this plan is for an operator to understand their distribution system. It will also determine if there is an issue so any steps necessary can be taken to resolve the issue prior to the standard for HAAs coming into effect to avoid adverse water quality incidents for your system.

#### **Factors influencing the creation of HAAs**

The levels of DBPs formed depend on many water quality parameters and operating conditions. In the case of HAAs, higher precursor concentrations (synthetic and natural organic matter, bromide ion) in the raw water, chlorine dose, chlorination pH, water temperature and the residence time will influence the type (THMs, HAAs, etc.) and the levels of DBPs formed. Studies found that surface water sources are more likely to produce higher HAAs than ground water sources.

HAAs concentrations are found to be higher in the distribution system, usually just after the chlorination process. Health Canada studies performed in 2002 and 2003 indicated that concentration of HAAs peaked in the distribution system closer to the chlorine addition point and decreased in the extremities of the system. Furthermore, the location of peak HAA values in a distribution system tends to change throughout the year, it is likely to be closer to the chlorine addition point in the summer and fall and further away from the point in the winter and spring. Precipitation and runoff events can also affect DBPs.

Questions can be directed to: [drinking.water@ontario.ca](mailto:drinking.water@ontario.ca).



Scott McCharles on behalf of Cammy Mack  
Director, Compliance, Promotion and Support Branch  
Ministry of the Environment, Conservation and Parks

# City of Markham Presentation to General Committee of Council

**Auditor General Services**

**March 4, 2019**

Presented by: **Geoff Rodrigues and Veronica Bila**



# Table of Contents

- Introductions
- About MNP
- Role of the Auditor General
- Audit Charter
- Audit Plan Development Approach
- Audit Plan Execution
- Status of Four Year Audit Plan
- Q & A

# Introductions

- Geoff Rodrigues, CPA, CA, CIA, CRMA, ORMP
  - Partner, National Leader of Internal Audit Services
  - City of Markham's Auditor General
- Veronica Bila, CPA, CA, CIA
  - Partner, Enterprise Risk Services
  - AG Audit Partner / Project Manager

# About MNP

- MNP was founded in 1945 and has expanded to over 80 offices across Canada.
- MNP is the fifth largest chartered accountancy and business advisory services firm in Canada, with approximately 790 partners and more than 4,600 team members.
- MNP has been recognized as one of the 50 best employers in Canada by AON Hewitt by remaining true to our values.



# Role of the Auditor General

- In November 2015, Council appointed MNP to serve as the City's Auditor General for a four year term with a budget of \$600,000. The Auditor General reports to Council.
- The public relies on the Auditor General to provide independent assurance that governmental activities are carried out, and accounted for, consistent with Council's intentions.
- The Auditor General is to provide independent, objective assurance and advice designed to add value and improve the City's operations.
- This is accomplished by conducting audits on the areas (i.e. programs, departments, processes, operations) that are regarded as high risk (i.e. financial, reputational, operational, etc.) to the City.
- The responsibilities of the Auditor General does not include those of the municipal external auditor.

# Audit Charter

- The purpose of the Auditor General's audit charter is to serve as the formal document outlining the following:
  - Scope of Auditor General Audit function;
  - Accountability;
  - Authority, Access and Support;
  - Responsibility;
  - Independence and Objectivity;
  - Reporting and Monitoring; and,
  - Standards.

## Audit Charter, cont.

- The scope of the Auditor General and audit function is defined annually through the approved Audit Plan and audit activities to ensure:
  - Risks are appropriately identified and managed.
  - Interaction with various governance groups occurs as needed.
  - Significant financial, managerial, and operating information is accurate, reliable, and timely.
  - Employees' actions and interactions, and arrangements with third parties, are in compliance with policies, standards, procedures and applicable laws and regulations.
  - Resources are acquired economically, used efficiently, and adequately protected.
  - Programs, plans, and objectives are achieved.
  - Quality and continuous improvement are fostered in the organization's control processes.
  - Legislative or regulatory compliance issues impacting the organization are recognized and addressed appropriately.

## Audit Charter, cont.

- The Auditor General's and the audit function's responsibilities, among other things, are to:
  - Develop a flexible annual audit plan using an appropriate risk-based methodology, including any risks or control concerns identified, and submit that plan along with any subsequent periodic changes to the General Committee for review and approval.
  - Implement the audit plan, and any special projects requested by the General Committee.
  - Maintain professional audit resources with sufficient knowledge, skills, experience, and professional certifications.
  - Issue periodic reports to the General Committee summarizing the results of audit activities.
  - Keep the Executive Leadership Team and General Committee informed of emerging trends and successful practices in auditing.
  - Execute a quality assurance program for the effective operation of audit activities and annually report the results of the program to the General Committee.

# Audit Plan Development Approach

- In 2016, the first year of our appointment, MNP's first task was to develop the four year Audit Plan.
- Enterprise Risk Management ("ERM") plays an important role in the Auditor General's audit function.
- The application of risk-based concepts and techniques in both the selection and execution of audit projects is crucial in supporting the strategic vision and mission of the City of Markham.
- When preparing the Audit Plan, our first step was to conduct an enterprise wide risk assessment.

## Audit Plan Development Approach, cont.

- To conduct the enterprise wide risk assessment, we performed the following:
  1. Conducted one-on-one interviews and risk identification workshops to gather information and to understand the risks at the departmental level.
    - a) One-on-one interviews held with Councillors, the Chief Administrative Officer (“CAO”) and Commissioners.
    - b) Workshops held with Senior Management and City staff.
    - c) Risk voting sessions conducted with all of the above.
    - d) In total, the AG had over 90 touchpoints between Council and City Staff.
  2. Compiled a prioritized listing of the 46 risks identified during the interviews and workshops, which formed the “Audit Universe”.

## Audit Plan Development Approach, cont.

3. Independently assessed the audit universe and built the four year Audit Plan and timing of audits, considering:

1. **Severity of each inherent risk (in the absence of mitigating controls).**
2. **Strategic relevance to the organization.**
3. **Areas, functions, or processes where there has been significant change in the past year or expected change in the coming years.**
4. **Emerging issues or trends.**
5. **Areas of particular complexity.**
6. **Functional areas that are core to the City's operations.**

## Audit Plan Execution

- Each individual audit is separately planned, and commences with the completion of an audit planning memo, that outlines: Objective, Scope, Risks, Approach, Deliverables.
- The audit planning memo is shared with Council in advance of the scheduled audit.
- Throughout the conduct of the audit, information is gathered from City staff through interviews, review of relevant documentation, and independent testing.
- Observations are discussed with senior staff to ensure facts are correct.
- Draft audit report is prepared and submitted to the CAO and Commissioners for review and to obtain management responses.
- Audit report is finalized and presented to General Committee of Council.

## Status of Four Year Audit Plan

- The four year audit plan includes completion of 10 audits and corresponding follow up audits, as follows:

Audit Name	Completion Date	Follow Up Completed
Property Tax & Water Billing	Property Tax – October 2016 Water Billing – February 2017	Property Tax – October 2017 Water Billing – June 2018
Cash Handling	April 2017	November 2018
Vendor Management	October 2017	March 2019
Cyber Security	March 2018	Planned for 2019
HRIS Implementation	June 2018	Planned for 2019
Development Charges	September 2018	Planned for 2019
Payroll	November 2018	N/A – no recommendations
Asset Management	Currently in progress	To be determined

## Status of Four Year Audit Plan, cont.

- Upcoming audits on the four year audit plan include the following:

Audit Name	Completion Date	Follow Up Completed
Information Management	2019	To be determined
Building and Development Review Process	2019	To be determined

# Q&A

# Contact Information

**Geoff Rodrigues**

National Internal Audit Leader  
Enterprise Risk Services  
416-515-3800  
Geoff.Rodrigues@mnp.ca

**Veronica Bila**

Partner  
Enterprise Risk Services  
416-515-3843  
Veronica.Bila@mnp.ca



## FINAL WORD

MNP is one of the largest chartered accountancy and business advisory firms in Canada. For more than 70 years, we have proudly served and responded to the needs of our mid-market clients in the public and private sectors. Through partner-led engagements, we provide a cost-effective approach to doing business and personalized strategies to help you achieve your goals.

**We look forward to getting to know you and your organization.**



# City of Markham

## Report of the Auditor General Vendor Management Audit – Follow Up

**Presented to:** General Committee of Council, City of Markham

**Date:** March 4, 2019

## BACKGROUND

On October 2, 2017, the Vendor Management Audit Report was issued, evaluating the City's vendor management processes and internal controls.

As reported, the City had adequate procedures in place over vendor management and there were efficient and effective internal controls related to vendor management activities.

The results of the audit identified two medium and three low priority observations and corresponding recommendations.

This follow-up audit on the observations and recommendations was completed January 2019.

# 1. CONFLICT OF INTEREST DECLARATION

MEDIUM

## Audit Recommendation:

To reduce the risk of unreported conflicts of interest, a declaration should be obtained from individuals involved with a procurement or in procurement approval/decision making roles that a conflict of interest does not exist. The declaration should become a key document to be retained as part of the procurement process to demonstrate adequate due diligence has been performed for each City procurement.

The Code of Ethics and Conduct, which is dated from 1998, should be updated to include the definition of conflict of interest to ensure conflicts can be assessed.

## Remediation Status: Complete

In December 2018, the City updated both the Code of Ethics and Conduct, and the Procurement Manual which includes an updated definition of “Conflict of Interest”. The City has also developed a Conflict of Interest Declaration Form. For all procurements, regardless of the contract dollar value, the City requires all staff who are involved with a procurement or in procurement approval/decision making roles to complete and sign a Conflict of Interest Declaration Form.

## 2. VENDOR MANAGEMENT POLICIES & PROCESS DOCUMENTATION

MEDIUM

### Audit Recommendation:

To ensure consistent application of vendor management activities enterprise-wide, all vendor management policies, processes and procedures should be compiled into a manual that can be used by all departments.

The manual should bring together vendor management processes in a common and easy-to-access format, that outlines the City's policies, established processes and procedures, and that can be adapted to different sized vendor contracts and departments.

### Remediation Status: Complete

The City has developed a Vendor Management section, included in the Procurement Manual, which consolidates and standardizes guidance for the City's vendor management policies, processes and procedures, as well as detailed process maps.

### 3. VENDOR PERFORMANCE MEASUREMENT

LOW

#### Audit Recommendation:

For consistent and reliable assessment of vendor performance, the City should 1) standardize vendor performance evaluation forms/scorecards, including criteria for each aspect of performance being assessed; 2) develop a vendor performance policy and process; and, 3) maintain evaluations in an accessible database. The City should also consider the use of vendor performance scores within the procurement process.

#### Remediation Status: Complete

The City has documented a standardized approach, including criteria, weighting score scale, and an evaluation form, for vendor performance measurement which is contained within the Vendor Management section of the Procurement Manual.

The City has included the use of past vendor performance scores during the reference check stage of the procurement process, whenever past vendors are involved, within their updated procurement process.

The City will also be leveraging upgrades to the customer relationship management software, when the software is implemented in 2020, to create a vendor database that can be accessed by staff to obtain real time information on vendors and their performance evaluation scores.

## 4. SOFTWARE INTEGRATION

LOW

### Audit Recommendation:

The City should investigate and evaluate options to integrate functions between SharePoint, eSolutions, Cayenta, and Procurement's Access Database, where possible, to streamline Procurement's processes and facilitate easier retrieval of information, contract management, as well as stronger internal controls. Further, the integration of Eclipse and Cayenta could facilitate streamlined invoice verification and project budget and purchase order processes.

### Remediation Status: Complete

The City is pursuing opportunities to update, upgrade and automate processes. For example, the City has an IT project which is planned for 2019 to explore integration of the interfaces between the Cayenta Financial system with Eclipse, the City's project management software.

Further enhancements will be pursued as part of Markham's Digital Strategy which is being implemented over the next two years.

## 5. FILE STRUCTURE & FILE MAINTENANCE / RETENTION

LOW

### Audit Recommendation:

To allow for consistent file structure and to improve document retrieval, file maintenance and retention, a policy outlining vendor contract and management file structure, naming convention and mandatory document inclusion should be developed. This could further be augmented with a checklist for vendor files.

### Remediation Status: Complete

The City has created a standard file folder structure for individual procurement projects. In addition, a documentation checklist has been developed, outlining the documents required for each procurement/project file.

## OVERALL RECOMMENDATION

The Auditor General recommends that:

- The Vendor Management Audit – Follow Up Presentation be received.

## ACKNOWLEDGEMENT

MNP extends our appreciation to the staff and management of the City for their co-operation and assistance throughout the engagement.





## City of Markham Vendor Management Audit – Follow Up

March 4, 2019

**PREPARED BY:** MNP LLP  
300 - 111 Richmond Street West  
Toronto, ON M5H 2G4

**MNP CONTACT:** Geoff Rodrigues, CPA, CA, CIA, CRMA, ORMP  
Partner, National Internal Audit Leader

**PHONE:** 416-515-3800  
**FAX:** 416-596-7894  
**EMAIL:** geoff.rodrigues@mnp.ca



March 4, 2019

Mayor and Members of Council,

Pursuant to MNP LLP's appointment to provide Auditor General Services, I am pleased to present the Vendor Management Audit Follow-Up Report ("Follow-Up Report") of the Auditor General for the City of Markham ("City"). This Follow-Up Report provides a status update on management's remediation of the observations and recommendations made in the Vendor Management Audit issued on October 2, 2017.

As reported in the October 2, 2017 audit report, the City had adequate procedures in place over vendor management; and, the audit found efficient and effective internal controls related to vendor management activities. Noted areas of strength include vendor award and account set up approval processes; purchase order and budget controls; and, escalation of vendor issues and contract termination procedures.

The results of the audit identified two medium priority observations and three low priority observations which included opportunities for improvement with respect to requesting conflict of interest declarations from departments prior to contract award; preparing a manual of the City's vendor management policies, processes and procedures; improvements to vendor performance evaluation forms and use of the performance assessments; integration of the various software systems that are used for vendor management; and implementation of a consistent file structure for file maintenance and retention.

As part of the Auditor General's audit plan, we conducted follow-up procedures to determine the status and evaluation of the effectiveness of management's activities to remediate the five observations identified in the October 2, 2017 audit report. This Follow-Up Report also provides any additional recommendations, if necessary.

This Follow-Up Report was discussed with the City's management, who have reviewed and provided their responses within, as applicable.

This Follow-Up Report will be posted on the City's website and made available to the public after tabling to Council.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Geoff Rodrigues', with a stylized flourish at the end.

Geoff Rodrigues, CPA, CA, CIA, CRMA, ORMP

Auditor General, City of Markham

## REMEDIATION STATUS

#	Observations & Recommendations (from October 2, 2017 Audit Report)	Initial Rating	Remediation Overview and Further Auditor General Recommendations	Status
1	<p><b><u>Conflict of Interest Declaration</u></b></p> <p>Employees are required to adhere to the Code of Ethics and Conduct, dated 1998, as a condition of employment, which defines a Conflict of Interest and sets out what employees shall and shall not do in event of a conflict. Staff are responsible for identifying conflicts of interest, with the onus on each staff to complete an Employee Conflict of Interest Disclosure Form with details of the identified conflict.</p> <p>The City does not have a policy that requires City staff involved in the preparation of a procurement or in procurement approval/decision making roles to declare that a conflict of interest does not exist.</p> <p><b><u>Recommendations</u></b></p> <p>While we did not identify any conflicts of interest during the audit, the risk of unreported conflicts of interest would be reduced by obtaining a declaration from individuals involved with a procurement or in procurement approval/decision making roles that a conflict of interest does not exist.</p> <p>The declaration should become a key document to be retained as part of the procurement process to demonstrate adequate due diligence has been performed for each City procurement.</p> <p>The definition of conflict of interest, contract value materiality and span of influence (i.e. group of individuals who would be able to influence the procurement results) should be determined and included within an updated Code of Ethics and Conduct to ensure conflicts can be assessed.</p> <p><b><i>Management Timeline: Q4 2017 (October 31, 2017)</i></b></p>	M	<p>In December 2018, the City updated both the Code of Ethics and Conduct, and the Procurement Manual which includes an updated definition of "Conflict of Interest".</p> <p>The City has also developed a Conflict of Interest Declaration Form. For all procurements, regardless of the contract dollar value, the City requires all staff who are involved with a procurement or in procurement approval/decision making roles to complete and sign a Conflict of Interest Declaration Form.</p> <p><b><u>Further Auditor General Recommendations</u></b></p> <p>None.</p>	Complete
2	<p><b><u>Vendor Management Policies and Process Documentation</u></b></p> <p>The policies and processes governing vendor management activities, such as vendor award, vendor account management, project management, vendor performance measurement, and vendor termination, exist in several by-laws, policies, and stand-alone process documents.</p> <p>While City departments generally follow similar processes to manage vendors, the quality and level of documentation of these vendor management processes varies widely from department to department. For example, some</p>	M	<p>The City has developed a Vendor Management section, included in the Procurement Manual, which consolidates and standardizes guidance for the City's vendor management policies, processes and procedures, as well as detailed process maps.</p>	Complete

#	Observations & Recommendations (from October 2, 2017 Audit Report)	Initial Rating	Remediation Overview and Further Auditor General Recommendations	Status
	<p>departments maintain detailed process flowcharts, while others have limited to no process documentation.</p> <p>In addition, several processes related to vendor management are not documented, such as processes relating to Procurement's Access Database and guidelines for the storage of documentation on the common network drive.</p> <p><b><u>Recommendations</u></b></p> <p>To ensure consistent application of vendor management activities enterprise-wide, all vendor management policies, processes and procedures should be compiled into a manual that can be used by all departments.</p> <p>The manual should bring together vendor management processes in a common and easy-to-access format, that outlines the City's policies, established processes and procedures, and that can be adapted to different sized vendor contracts and departments.</p> <p>While facilitating a more consistent approach to vendor management, the manual will also assist with training new staff and succession management. The manual should leverage the existing project management methodology/framework established by the City's Project Management Support Office ("PMSO"), as well as the City's existing Purchasing Manual, and include:</p> <ol style="list-style-type: none"> <li>1. Vendor award;</li> <li>2. Vendor account set-up;</li> <li>3. Vendor on-boarding;</li> <li>4. Conflict of interest;</li> <li>5. Vendor performance tracking and monitoring;</li> <li>6. Communication and escalation protocols;</li> <li>7. Contract management;</li> <li>8. Project management budget tracking, purchase orders and contingencies;</li> <li>9. Project close-out;</li> <li>10. Vendor performance measurement;</li> <li>11. Termination protocols; and</li> <li>12. Vendor account purging.</li> </ol> <p><b><i>Management Timeline: Q3 2018</i></b></p>		<p><b><u>Further Auditor General Recommendations</u></b></p> <p>None.</p>	

#	Observations & Recommendations (from October 2, 2017 Audit Report)	Initial Rating	Remediation Overview and Further Auditor General Recommendations	Status
3	<p><b><u>Vendor Performance Measurement</u></b></p> <p>At the completion of a vendor contract, the vendor's performance is assessed by completing and returning a vendor performance evaluation form/scorecard.</p> <p>During the audit, we found that there are four commonly used vendor scorecards, in addition to customized scorecards created by departments for specific vendors or circumstances.</p> <p>In reviewing the number of vendor performance evaluation forms/scorecards used by the City, the following observations were made:</p> <ul style="list-style-type: none"> <li>• Vendor scorecard do not provide criteria as to what a specific score means, potentially resulting in a wide variance from one assessment to another; and,</li> <li>• While the City's general practice is to review performance of vendors who are rated below 70%, it is not clear how this would be calculated on several vendor evaluation forms/scorecards.</li> </ul> <p>Further, we found that vendors are not provided with the results of their performance evaluation, nor are the results compiled for analysis and shared with City departments.</p> <p>It is the City's practice to compile all previous performance evaluations for a specific vendor which are then forwarded to the City's Project Manager for their review and analysis prior to awarding a new contract.</p> <p><b><u>Recommendations</u></b></p> <p>For consistent and reliable assessment of vendor performance, the City's approach to conducting evaluations and tracking vendor performance should be revised by implementing the following:</p> <ul style="list-style-type: none"> <li>• Standardization of vendor performance evaluation forms/scorecards ensuring a clear quantitative score is given;</li> <li>• Forms/scorecards provide specific criteria for each aspect of the vendor's performance being assessed;</li> <li>• Evaluations are retained in an accessible database (i.e. Vendor Performance Database) to perform analytics (i.e. to track trends) and to share vendor performance scores within the City;</li> <li>• Develop a vendor performance policy that includes communication with vendors regarding the performance process, review of scores</li> </ul>	L	<p>The City has documented a standardized approach, including criteria, weighting score scale, and an evaluation form, for vendor performance measurement contained within the Vendor Management section of the Procurement Manual.</p> <p>The City has included the use of past vendor performance scores during the reference check stage of the procurement process, whenever past vendors are involved, within their updated procurement process.</p> <p>The City will also be leveraging upgrades to the customer relationship management software, when the software is implemented in 2020, to create a vendor database that can be accessed by staff to obtain real time information on vendors and their performance evaluation scores.</p> <p><b><u>Further Auditor General Recommendations</u></b></p> <p>None.</p>	Complete

#	Observations & Recommendations (from October 2, 2017 Audit Report)	Initial Rating	Remediation Overview and Further Auditor General Recommendations	Status
	<p>with them as well as by City and vendor management, criteria for documentation for outlier evaluations, monitoring and use of evaluation statistics, and an appeals process;</p> <ul style="list-style-type: none"> <li>• Mandatory annual evaluations for multi-year contracts and interim evaluations for large-scale projects; and,</li> <li>• Consider the threshold and develop clear criteria for disqualification, including the potential for longer periods of disqualification for repeated or profound instances of poor performance.</li> </ul> <p>The City should also consider the use of vendor performance scores within the procurement process. For example, past vendor performance scores could form part of a vendor's mark for a future procurement, providing an incentive for vendor's to continually perform well to continue working with the City.</p> <p>Maintaining a Vendor Performance Database will also allow the City to track specific vendor information, such as the various names they operate under, especially if poor performing vendors change their names often.</p> <p><b>Management Timeline: Q3 2018</b></p>			
4	<p><b><u>Software Integration</u></b></p> <p>There are several software systems used by various departments throughout the vendor management process, such as Cayenta, Microsoft Access, Microsoft Excel, Microsoft Project, Sharepoint, Eclipse, and eSolutions.</p> <p>None of these systems are integrated to share data, resulting in manual movement of data, causing duplication of work.</p> <p><b><u>Recommendations</u></b></p> <p>Allowing for data exchange between systems facilitates more streamlined processes requiring less manual inputting of data, reducing the potential for data entry errors and duplication of work.</p> <p>The City should investigate and evaluate options to integrate functions between SharePoint, eSolutions, Cayenta, and Procurement's Access Database, where possible, to streamline Procurement's processes and facilitate easier retrieval of information, contract management, as well as stronger internal controls.</p>	L	<p>The City is pursuing opportunities to update, upgrade and automate processes. For example, the City has an IT project which is planned for 2019 to explore integration of the interfaces between the Cayenta Financial system with Eclipse, the City's project management software.</p> <p>Further enhancements will be pursued as part of Markham's Digital Strategy which is being implemented over the next two years.</p> <p><b><u>Further Auditor General Recommendations</u></b></p> <p>None.</p>	Complete

#	Observations & Recommendations (from October 2, 2017 Audit Report)	Initial Rating	Remediation Overview and Further Auditor General Recommendations	Status
	<p>Further, the integration of Eclipse and Cayenta could facilitate streamlined invoice verification and project budget and purchase order processes.</p> <p>The City should also consider implementing Eclipse in all departments with large contracts/projects.</p> <p>As the integration of software systems introduces different risks related to process change and security access, the City should ensure that these risks are appropriately mitigated.</p> <p><b>Management Timeline: Q3 2018</b></p>			
5	<p><b><u>File Structure and File Maintenance/Retention</u></b></p> <p>During the audit, we found inconsistencies within the structure and the maintenance of documentation for vendor contract and vendor management files.</p> <p>For example, there is variation as to the format and types of documents (i.e. formal documents vs informal emails, unsigned vs signed documents) that are retained on the Q Drive by Procurement.</p> <p>It is understood that the City is currently transitioning to a paperless office and is investigating digitizing all vendor management documents within Procurement in the eSolutions portal.</p> <p><b><u>Recommendations</u></b></p> <p>To allow for consistent file structure and to improve document retrieval, file maintenance and retention, a policy outlining vendor contract and management file structure, naming convention and mandatory document inclusion should be developed.</p> <p>Well maintained files will ensure there is a clear audit trail for each vendor's file and will facilitate the evolution to a paperless office.</p> <p>This could further be augmented with a checklist for vendor files.</p> <p><b>Management Timeline: Q4 2017</b></p>	L	<p>The City has created a standard file folder structure for individual procurement projects. In addition, a documentation checklist has been developed, outlining the documents required for each procurement/project file.</p> <p><b><u>Further Auditor General Recommendations</u></b></p> <p>None.</p>	Complete

## **RECOMMENDATION**

The Auditor General recommends that:

1. The Vendor Management Audit - Follow Up Report be received.



## ABOUT MNP

MNP is one of the largest chartered accountancy and business consulting firms in Canada, with offices in urban and rural centres across the country positioned to serve you better. Working with local team members, you have access to our national network of professionals as well as strategic local insight to help you meet the challenges you face everyday and realize what's possible.



Visit us at [MNP.ca](http://MNP.ca)



Praxity, AISBL, is a global alliance of independent firms. Organised as an international not-for-profit entity under Belgium law, Praxity has its administrative office in London. As an alliance, Praxity does not practice the profession of public accountancy or provide audit, tax, consulting or other professional services of any type to third parties. The alliance does not constitute a joint venture, partnership or network between participating firms. Because the alliance firms are independent, Praxity does not guarantee the services or the quality of services provided by participating firms.



# MEMORANDUM

TO: Members of General Committee  
 FROM: Shane Manson, Senior Manager Revenue & Property Tax  
 DATE: Thursday, February 21, 2019  
 SUBJECT: Digital Payment Initiative

---

On February 19<sup>th</sup>, 2019, staff presented the Digital Payment Initiative report to General Committee. The report sought Council approval to discontinue the acceptance of cash and cheques as forms of payment for transactional services completed through the cash management and contact centre service counters effective January 1<sup>st</sup>, 2020. This initiative would have enabled the migration of all payment transactions completed through the contact centre and cash management counters to digital forms of payment.

Committee members discussed the following:

- The timing of and implementation period for the initiative
- The impact on payment preference for some residents (specifically seniors) and business owners who may not be familiar with or have the ability to pay digitally
- Maintaining the acceptance of cheques as a form of payment for transactional services
- The possibility of rolling out the initiative in phases to allow residents more time to adapt to the proposed changes; and,
- Consulting with the Seniors Advisory Committee to better understand the impacts on seniors

Through the discussion, the Treasurer suggested that the Committee should consider eliminating the acceptance of cash payments for property taxes only. Committee requested that Staff prepare a memo addressing the discussion and return to the March 4, 2019 General Committee meeting.

In light of the feedback received from Committee and the proposal tabled by the Treasurer, Staff are recommending that the Digital Payment Initiative be modified to include the acceptance of cheques for transactional services completed at the Civic Centre service counters. Therefore, only the acceptance of cash payments for property taxes will be discontinued effective January 1<sup>st</sup>, 2020.

As noted in the report entitled Digital Payment Initiative dated February 19<sup>th</sup>, 2019, Staff will implement a comprehensive communication plan throughout 2019 to effectively inform residents and business owners that the acceptance of payments made by cash will be discontinued in 2020. However, to ensure there is awareness and a smooth adoption, Staff propose to implement a one (1) year grace period. Within the first year (2020) of the initiative, cash management will facilitate the acceptance cash payments for property taxes, on a one-time only basis. Staff will utilize this transition period, as an opportunity to support and educate our residents and business owners that cash payments are being discontinued.

Upon completion of the transition/grace period and effective January 1<sup>st</sup> 2021, the contact centre and cash management service counters will accept the following forms of payment in-person:

- Cash - all transaction types (excluding property taxes)
- Cheques – all transaction types
- Debit Card – all transaction types
- Credit Card – all transaction types (excluding property taxes)

Residents and business owners will continue to have the ability to utilize the following online payment methods to complete their service transactions:

- Pre-authorized payments – for property tax payments
- Online Banking – all invoice based transaction types

It is anticipated that the discontinuation of cash payments for property taxes will result in annual savings of \$4,500, which is attributed to the following payment service;

- Armoured Courier Service: The City utilizes the services of a professional armoured courier service for the transportation of deposits (cash) between the Civic Centre and the bank. This service would no longer be required at this location.

As a result of this initiative, it is projected that there will be an uplift in the costs associated with merchant services due to an increase number of customers completing in-person debit card payments for property taxes. Staff estimate the increase in merchant service costs for this initiative to be less than \$1,500. Staff will report back in 2021 with the results and feedback of the initiative, along with possible future payment modification opportunities for Council consideration.

**Recommendation:**

1. That the memo entitled Digital Payment Initiative dated February 21<sup>th</sup>, 2019 be received; and,
2. That Council approve discontinuing the acceptance of cash as a form of payment for property taxes effective January 1<sup>st</sup>, 2020; and,
3. That Staff will report back in 2021 with the results and feedback of the initiative, along with possible future payment modification opportunities for Council consideration; and,
4. That staff be authorized and directed to do all things necessary to give effect to this resolution.